

Preserve Edge Plan

OTAY RANCH
VILLAGE 14 AND PLANNING AREAS 16/19

Specific Plan Amendment– Appendix 1

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TABLE OF CONTENTS

| | | |
|------|---|----|
| I. | INTRODUCTION | 1 |
| II. | FACILITIES PROPOSED WITHIN THE 100-FOOT PRESERVE EDGE..... | 5 |
| A. | PUBLIC NEIGHBORHOOD PARK (P-2) | 8 |
| B. | PUBLIC SEWER LIFT STATION/WATER QUALITY/HYDROMODIFICATION BASIN | 10 |
| C. | MODIFIED RESIDENTIAL COLLECTORS | 11 |
| D. | OWD WATER RESERVOIR, ACCESS ROAD AND WATER TRANSMISSION LINE | 14 |
| E. | MAINTENANCE ACCESS AND TRAIL EASEMENTS | 15 |
| F. | WATER QUALITY AND DRAINAGE FACILITIES | 17 |
| 1. | Biofiltration Basin..... | 18 |
| 2. | Typical Canyon Subdrain Design | 20 |
| 3. | Typical Storm Drain Outlet..... | 22 |
| 4. | Typical Box Culvert..... | 23 |
| 5. | Typical Storm Drain Maintenance Access Road..... | 24 |
| III. | COMPLIANCE WITH RMP POLICIES AND MSCP COUNTY SUBAREA PLAN GUIDELINES | |
| | 25 | |
| A. | LANDSCAPE MATERIALS | 25 |
| B. | USES WITHIN THE PRESERVE EDGE..... | 26 |
| C. | LIGHTING..... | 27 |
| D. | ACCESS CONTROLS | 28 |
| E. | BUFFERS | 33 |
| F. | FUEL MODIFICATION ZONES (FMZ) | 33 |
| G. | TEMPORARY CONSTRUCTION IMPACTS TO THE RMP PRESERVE..... | 38 |
| H. | TYPICAL CONDITIONS AT THE PRESERVE EDGE | 39 |
| I. | DRAINAGE..... | 46 |
| IV. | BEST MANAGEMENT PRACTICES WITHIN THE 100' RMP PRESERVE EDGE | 49 |
| A. | TOXIC SUBSTANCES..... | 49 |
| B. | IRRIGATION..... | 49 |
| C. | NOISE..... | 50 |
| D. | INVASIVE PLANT MATERIALS | 50 |
| V. | CITY OF SAN DIEGO MSCP LAND USE ADJACENCY GUIDELINE COMPLIANCE | 51 |
| A. | DRAINAGE..... | 52 |
| B. | TOXICS..... | 53 |
| C. | LIGHTING..... | 53 |
| D. | NOISE..... | 54 |
| E. | BARRIERS | 54 |
| F. | INVASIVES..... | 55 |
| G. | BRUSH MANAGEMENT..... | 56 |
| H. | GRADING/LAND DEVELOPMENT | 56 |
| VI. | INTERNAL CIRCULATION AND RESERVOIR OPTION..... | 57 |

EXHIBIT LIST

| | |
|--|-----------|
| EXHIBIT 1 - DEVELOPMENT AREAS SUBJECT TO THE OTAY RANCH RMP PRESERVE EDGE PLAN REQUIREMENTS..... | 3 |
| EXHIBIT 2 - PROPOSED PROJECT AMENDMENT CONTEXT..... | 4 |
| EXHIBIT 3 - P-2 PUBLIC PARK CONCEPT PLAN (VILLAGE 14) | 9 |
| EXHIBIT 4 - PUBLIC SEWER LIFT STATION AND WATER QUALITY/HYDROMODIFICATION BASIN | 10 |
| EXHIBIT 5 - MODIFIED RESIDENTIAL COLLECTOR STREET "I" - VILLAGE 14 | 11 |
| EXHIBIT 6 - MODIFIED RESIDENTIAL COLLECTOR STREETS "A" & "I" - VILLAGE 14 | 12 |
| EXHIBIT 7 - MODIFIED RESIDENTIAL COLLECTOR STREET "A" - VILLAGE 14 | 13 |
| EXHIBIT 8 - OWD WATER RESERVOIR /ACCESS ROAD/ WATER TRANSMISSION LINE (VILLAGE 14) | 14 |
| EXHIBIT 9 - MAINTENANCE ACCESS EASEMENT/TRAIL EASEMENT/RETAINING WALLS @ R-3/R-4 (VILLAGE 14) | 16 |
| EXHIBIT 10 - CONCEPTUAL WATER QUALITY AND DRAINAGE FACILITIES W/I THE 100' PRESERVE EDGE ... | 17 |
| EXHIBIT 11 - BIOFILTRATION BASIN @ P-1 PARK (VILLAGE 14) | 19 |
| EXHIBIT 12 - TYPICAL CANYON SUBDRAIN | 21 |
| EXHIBIT 13 - TYPICAL STORM DRAIN OUTLET | 22 |
| EXHIBIT 14 - TYPICAL BOX CULVERT..... | 23 |
| EXHIBIT 15 - TYPICAL STORM DRAIN MAINTENANCE ACCESS ROAD..... | 24 |
| EXHIBIT 16 - CONCEPTUAL FENCE AND WALL/ACCESS PLAN..... | 30 |
| EXHIBIT 17 - TYPICAL FENCE AND WALL DETAILS | 31 |
| EXHIBIT 18 - TYPICAL CONDITIONS WITHIN 100' PRESERVE EDGE PER THE OTAY RANCH RMP REQUIREMENTS..... | 40 |
| EXHIBIT 19 - TYPICAL CONDITION 1 - PERIMETER SLOPE @ SINGLE FAMILY R-12 | 41 |
| EXHIBIT 20 - TYPICAL CONDITION 2 - BIOFILTRATION BASIN | 41 |
| EXHIBIT 21 - TYPICAL CONDITION 3 - WATER RESERVOIR @ SINGLE FAMILY R-4 | 42 |
| EXHIBIT 22 - TYPICAL CONDITION 4 - PERIMETER SLOPE @ SINGLE FAMILY R-4 | 42 |
| EXHIBIT 23 - TYPICAL CONDITION 5 - PERIMETER SLOPE @ SINGLE FAMILY R-3 | 43 |
| EXHIBIT 24 - TYPICAL CONDITION 6 - BIOFILTRATION BASIN..... | 43 |
| EXHIBIT 25 - TYPICAL CONDITION 7 - PERIMETER SLOPE WITH TRAIL EASEMENT AND RETAINING WALL @ SINGLE FAMILY R-4..... | 44 |
| EXHIBIT 26 - TYPICAL CONDITION 8 - PERIMETER SLOPE @ MULTI-FAMILY R-8..... | 45 |
| EXHIBIT 27 - TYPICAL CONDITION 9 - PERIMETER SLOPE @ SINGLE FAMILY R-13 | 45 |
| EXHIBIT 28 - VILLAGE 14 DEVELOPMENT AREAS ADJACENT TO CITY OF SAN DIEGO MSCP PRESERVE | 51 |
| EXHIBIT 29 - STREET "I" REALIGNMENT OPTION..... | 57 |
| EXHIBIT 30 - OWD RESERVOIR, ACCESS ROAD AND WATER TRANSMISSION LINE OPTION | 58 |
| EXHIBIT 31 - TYPICAL CONDITION 8 - PERIMETER SLOPE/STREET "I" @ SINGLE-FAMILY R-8 | 59 |

I. INTRODUCTION

The County of San Diego MSCP Plan (1997) (MSCP County Subarea Plan) implements the MSCP Plan within the unincorporated areas of the County of San Diego and encompasses 252,132 acres. The MSCP County Subarea Plan and Implementing Agreement (IA) incorporated the Otay Ranch Resource Management Plan (RMP) into the MSCP Plan. The RMP and the 11,375-acre Otay Ranch RMP Preserve (RMP Preserve) serve as mitigation of biological impacts identified in the Otay Ranch GDP/SRP Final Program EIR (Otay Ranch PEIR (City of Chula Vista and County of San Diego 1993c); IA Section 10.5.2). The Otay Ranch RMP Preserve is a hardline preserve system included in the MSCP Subregional Preserve and includes land reserved for mitigation¹ for impacts to sensitive resources as a result of Otay Ranch development.

In conjunction with the adoption of the Otay Ranch General Development Plan/Otay Subregional Plan (Otay Ranch GDP/SRP) on October 28, 1993, the County Board of Supervisors adopted the Otay Ranch General Plan Amendment, GPA 92-04. The Board of Supervisors also adopted Policy I-109 which states:

It is the policy of the Board of Supervisors that Otay Ranch Associated Documents listed below, all on file with the Clerk of the Board of Supervisors and identified by the Document Numbers indicated below, shall be used in the preparation of plans, reports and other documents for the Otay Ranch project; County decision-makers and staff shall assure that applications submitted for the development portions of the Otay Ranch project are consistent with these Associated Documents:

- Mitigation Monitory Program (Doc. No. 759220)
- Resource Management Plan (Doc. No. 759221)
- Village Phasing Plan (Doc. No. 759222)
- Facility Implementation Plan (Doc. No. 759223)
- Service/Revenue Plan (Doc. No. 759224)

The Otay Ranch RMP requires preparation of a Preserve Edge Plan “for all SPAs that contain areas adjacent to the Preserve.” (1993 RMP, Chapter 3, Page 114). The Approved -Project and Preserve Edge Plan for Village 14 and Planning Areas 16/19 approved by the County on June 26, 2019, as well as the Specific Plan Amendment and amended Preserve Edge Plan² comply~~ies~~ with the RMP requirements.

¹ The Proposed Project Amendment may be required to meet additional mitigation requirements. See the Certified EIR (16-19-006), Section 4.1.4. – Biological Resources and the Biological Resources Technical Memorandum for the Otay Ranch Village 14 and Planning Areas 16/19 Proposed Project Amendment, Prepared by Dudek (December 2019), for additional details.

² This document includes redline text changes to the Approved Project Preserve Edge Plan to reflect the Proposed Project Amendment; however, all graphics have been replaced to reflect the Proposed Project Amendment.

To provide further guidance relating to the content of the Preserve Edge Plan, the MSCP County Subarea Plan contains guidelines related to land use adjacency and implementation of fuel modification zones (See Section 1.10, Land Uses Adjacent to the Preserve; Section 1.11, Fuel Modification Zones; Section 3.0 South County Segment; and Section 3.4, Land Uses Adjacent to the Preserve). The Otay Ranch GDP/SRP, Chapter 10, Section B. 7. Resource Preserve – Adjacent Land Uses also provides guidance regarding the purpose of the Preserve Edge Plan. Applicable Otay Ranch GDP/SRP, RMP and MSCP County Subarea Plan policies are provided and evaluated below.

Refer to Exhibit 1 for Development Areas subject to the Preserve Edge Plan requirements. Refer to Exhibit 2 for a depiction of the jurisdictional and ownership context along the perimeter of the development areas.

Development areas adjacent to the City of San Diego MSCP Cornerstone Properties are described in Section E - City of San Diego MSCP Land Use Adjacency Guideline Compliance. See the Village 14 and Planning Areas 16/19 Biological Resources Technical Report (Dudek 2017) and the Biological Resources Technical Memorandum for the Otay Ranch Village 14 and Planning Areas 16/19 Proposed Project Amendment, prepared by Dudek (December 2019) regarding planned and future facility analyses.



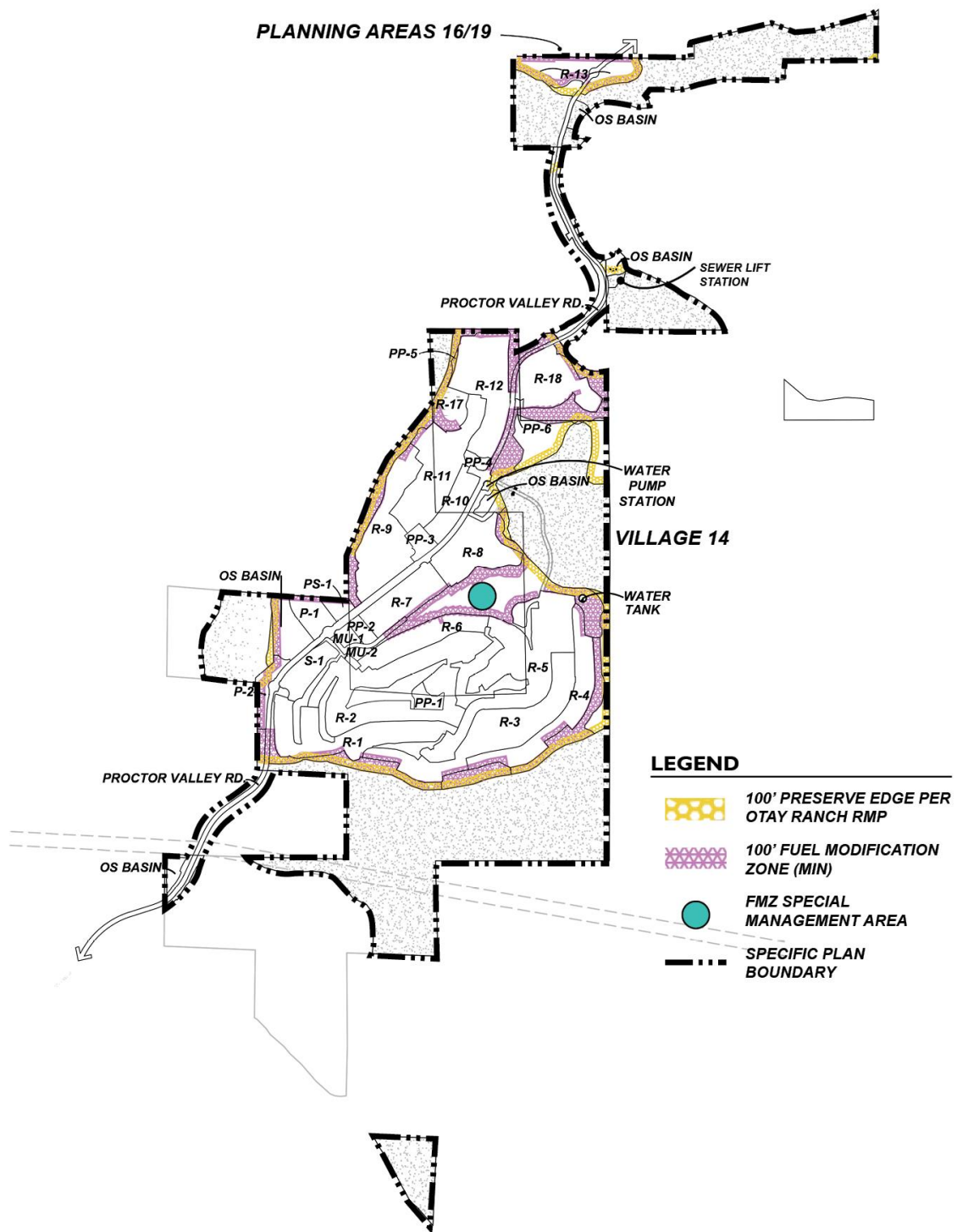


Exhibit 1 –Development Areas Subject to the Otay Ranch RMP Preserve Edge Plan Requirements

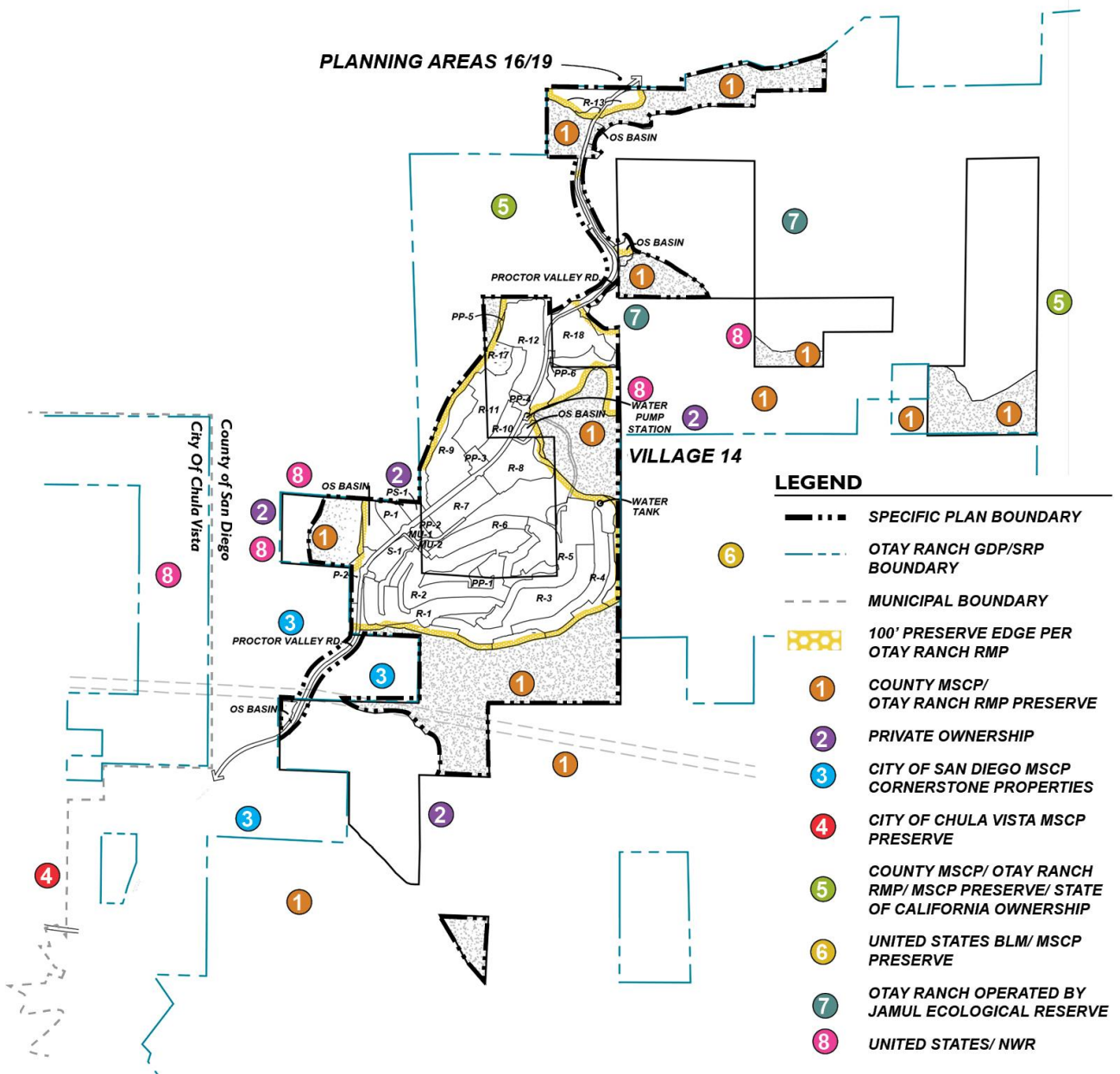


Exhibit 2 – Proposed Project Amendment Context

II. FACILITIES PROPOSED WITHIN THE 100-FOOT PRESERVE EDGE

The following excerpt from the MSCP County Subarea Plan, Chapter 1, Section 1.10 *Land Uses Adjacent to the Preserve* is provided to guide the land uses proposed adjacent to the MSCP Preserve:

“Residential uses will be the most common uses located adjacent to the preserve, although roads, manufactured open space, recreational facilities, and industrial and commercial uses will occur in some areas. The following section establishes guidelines for those uses that are compatible with the preserve. The subsequent section (1.11), along with area specific management directives outlined in the subsequent chapters, establishes a brush management zone that will separate the preserve from developed uses.

The following uses are also allowed on land adjacent to the preserve with no limitations other than subject to the guidelines listed in paragraphs A-E below:

Manufactured open space (e.g. parks, playing fields, vegetated slopes, green belts, etc.) roads, recreational facilities, water reservoirs, other public facilities and utilities, agricultural and grazing operations are deemed to be compatible when located immediately adjacent to the preserve. No additional buffers or transitional areas are required.

In addition, hiking, bird watching, horseback riding, camping, power boating, water skiing, fishing pet exercising, hang gliding, hot air ballooning, scientific research, mountain biking, equestrian facilities, athletic fields, sailing, sun bathing, swimming, golf courses, hunting, brush management are also compatible uses.

The following guidelines will be used when planning and implementing uses and activities when located immediately adjacent to the preserve. These guidelines are meant to ensure compatibility with the preserve.

- A. Where feasible, plant materials used to landscape manufactured open space, road cut/fills and recreational facilities should consist of native species similar/compatible with the adjacent habitat in the preserve. If possible, those species will be based on plants with genetic materials of the area.
- B. Areas and structures subject to heavy human use (e.g. ball fields, parking lots, hardscapes/playing courts, equestrian centers, staging areas, etc.) shall, to the extent feasible, be located away from the edge of the preserve.
- C. Lighting within 100 feet of the preserve edge shall be confined to areas necessary to ensure public safety, and shall be limited to low pressure sodium fixtures, shielded and directed away from the preserve where possible.
- D. Fencing along the preserve boundary is desirable but not mandatory and may provide a barrier to fire, invasive species, and uncontrolled

human access. Should a landowner or preserve manager decide to install fencing, the type, style and height must conform to existing regulations or those included in the Applicable Specific Plan.

- E. There shall be no requirements for buffers outside the preserve system. All open space requirements for the preserve system shall be incorporated into the preserve system.

The following excerpt from the Otay Ranch Resource Management Plan, Chapter 3, Goals, Objectives, Policies of the RMP is provided to guide the land uses proposed that are appropriate adjacent to the Preserve:

OBJECTIVE 7 – RESOURCE PRESERVE – ADJACENT LAND USES

Identify allowable uses within appropriate land use designations for areas adjacent to the Preserve.

Policy 7.1

All development plans adjacent to the edge of the Preserve shall be subject to review and comment by the Preserve Owner/Manager, the City of Chula Vista, and the County of San Diego to assure consistency with resource protection objectives and policies.

Policy 7.2

The “edge” of the Preserve is a strip of land 100 feet wide that surrounds the perimeter of the Preserve. It is not a part of the Preserve – it is a privately or publicly owned area included in lots within the urban portion of Otay Ranch immediately adjacent to the Preserve.

Standard: “Edge Plans” shall be developed for all SPAs that contain areas adjacent to the Preserve.

Guidelines:

- 1) The edge plans shall be prepared in consultation with a qualified biologist to ensure that proposed land uses will not adversely affect resources with the Preserve.
- 2) The edge plan shall include a list of plant species that may and may not be used for landscaping within the edge.
- 3) Fuel modification zones may be incorporated into the edge.
- 4) Development adjacent to the edge shall be restricted to development types that are least likely to impact specific adjacent biological resources.
- 5) Landscaping or block walls shall be used in appropriate areas adjacent to the edge to reduce impacts of noise and light.
- 6) No structures other than fencing and walls shall be allowed, and those shall be built and landscaped in such a way as to minimize visual impacts on the Preserve and the OVRP.

Policy 7.3

Protect and maintain biological integrity of unconveyed land adjacent to developing SPAs.

Standards:

- 1) Provide temporary fencing around perimeter sensitive habitat areas and/or areas occupied by sensitive species adjacent to any SPA under construction to inhibit encroachment by construction traffic, etc.
- 2) Phase construction of SPAs immediately adjacent to sensitive biological resources to avoid indirect impacts. For example, construction activities that equal or exceed volume levels that inhibit breeding and nesting activities of the California gnatcatcher should be curtailed during the nesting period of the bird.

Consistent with the RMP and MSCP County Subarea Plan, facilities, including portions of public and parks, the perimeter trail, residential streets, hydromodification/water quality basins, public sewer lift station, public water pump station, storm drain outlets, a box culvert, a water line, an Otay Water District water tank and access road and canyon subdrains are proposed within the 100' Preserve Edge as described below. The 100' Fuel Modification Zone is also proposed within portions of the 100' Preserve Edge. Facilities and improvements proposed within the 100' Preserve Edge are described in greater detail in the following sections.

A. PUBLIC NEIGHBORHOOD PARK (P-2)

Village 14 includes ~~three-two~~ public parks (P-1, ~~and~~ P-2 ~~and P-3~~). The P-~~32~~ Park is located in Central Village 14 and a portion of this park is within the 100' Preserve Edge. The P-1 ~~and P-2~~ public neighborhood parks ~~are-is~~ not within the 100' Preserve Edge. ~~Public neighborhood park P-4 is located within Planning Area 16 and is discussed on Page 12.~~

The P-~~32~~ Park conceptual design includes both active and passive recreation facilities ~~and is bisected by the entrance to R-12 residential area~~. The portion of the P-~~32~~ Park within the 100' Preserve Edge is comprised of landscaped lawn and planter areas, manufactured slopes, a concrete walkway and a ~~drop-off area~~ parking lot associated with the P-2 Park (refer to Exhibit 3). ~~A portion of the roadway providing access to the R-12 single family neighborhood, and parking lots associated with the public park are also included within a portion of the 100' Preserve Edge at this location. Post and rail a 5-foot high tubular steel fence~~ ing is planned along the perimeter of the park to control access and to preserve views out of and into the park. Appropriate signage will be posted notifying the public of RMP Preserve access restrictions. There are no structures located within the 100' Preserve Edge.

Remaining portions of the park are subject to the fuel modification requirements described in Section C.7. Fuel Modification Zones and established in the Village 14 and Planning Areas 16/19 Fire Protection Plan and the Fire Protection Technical Memorandum – Otay Ranch Village 14 and Planning Areas 16/19 Proposed Project Amendment prepared by Dudek (December 2019).

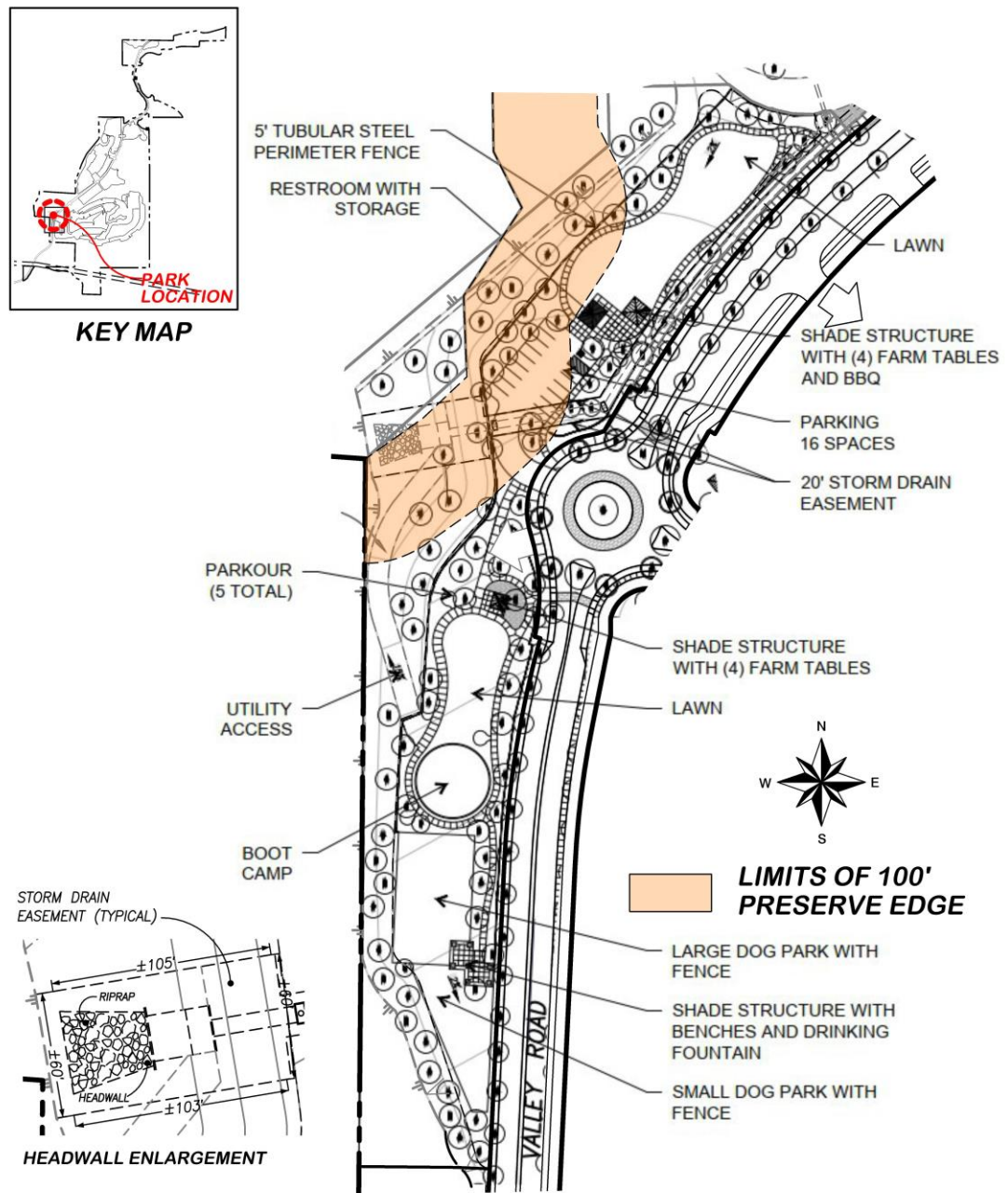


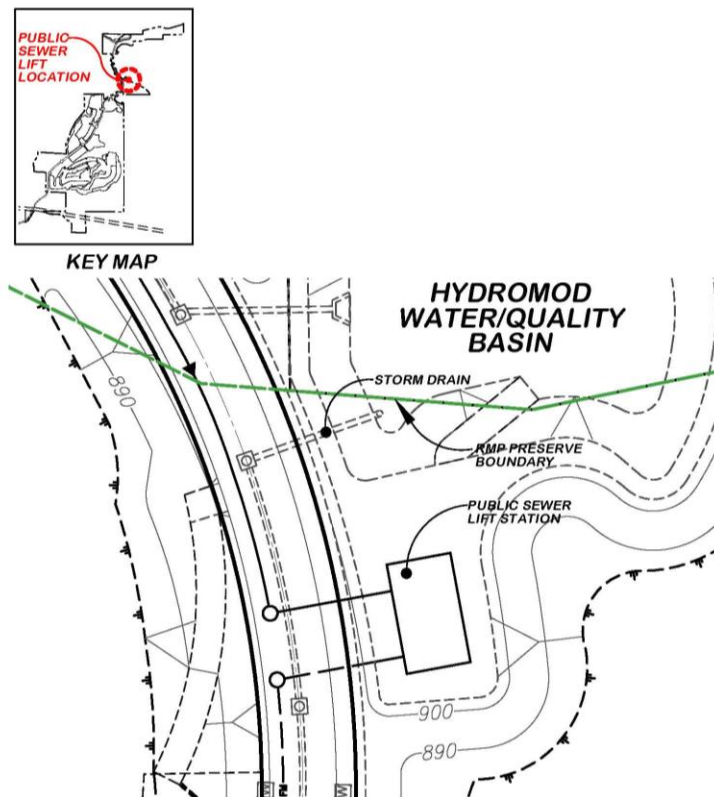
Exhibit 3 - P-2 Public Park Concept Plan (Village 14)

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B. PUBLIC SEWER LIFT STATION/WATER QUALITY/HYDROMODIFICATION BASIN

The public sewer lift station is located adjacent to Proctor Valley Road within the Preserve. Facilities would include a below ground pump room with control building at grade, below ground overflow storage tank, outdoor pad mounted standby diesel generator, diesel engine driven portable pump, odor control storage and associated facilities, wet well jib crane and miscellaneous site improvements. The site would have an 8-foot high perimeter block wall with rolling gates for entry. Refer to Exhibit 4, Public Sewer Lift Station and Water Quality/Hydromodification Basin, for the location of this facility.

Located adjacent to the public sewer lift station, a portion of a water quality/hydromodification basin is also within the Preserve. Improvements within the Preserve are limited to slopes surrounding the southern portion of the basin.



Note: Sewer Lift Station details and specifications will be per San Diego County Regional Standard drawings with final approval during County review of engineering construction documents.

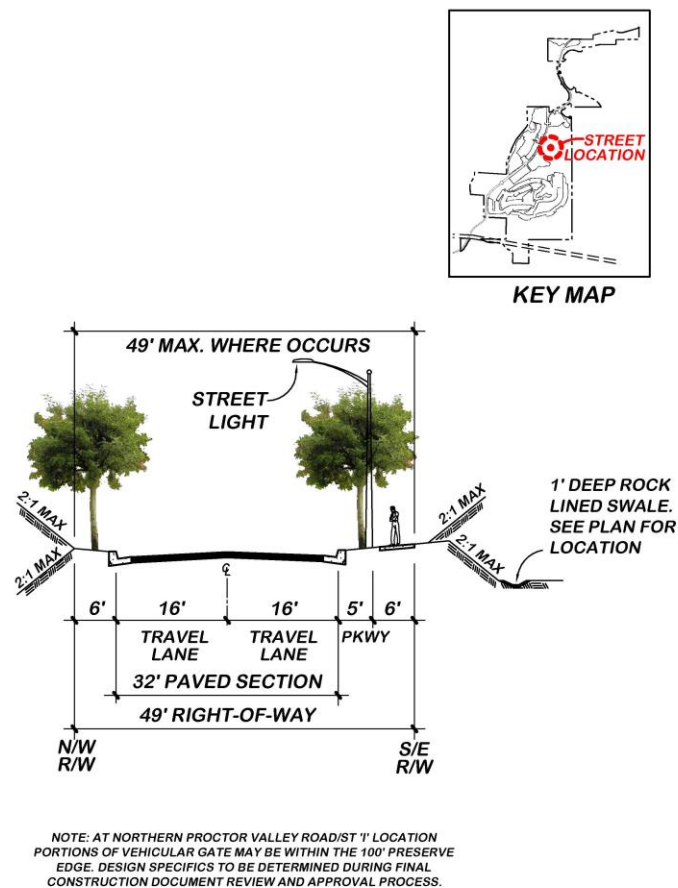
Exhibit 4 - Public Sewer Lift Station and Water Quality/Hydromodification Basin

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B.C. MODIFIED RESIDENTIAL COLLECTORS

Portions of Modified Residential Collector Streets (refer to Exhibits 5, 6 and 7) are proposed within the 100' Preserve Edge: two streets providing access to single family neighborhoods in South-Central Village 14 (Streets "A," and "I"). ~~No driveway cuts are planned along these roadway segments.~~ Improvements include two travel lanes, landscaped parkways, sidewalks and a rock-lined swale (where applicable). Post and rail fencing will be provided outside the right-of-way, behind the sidewalk, adjacent to the RMP Preserve. Appropriate signage will be posted notifying the public of RMP Preserve access restrictions.

Standard streetlights are also proposed along these residential streets. Lighting must be shielded and directed away from the RMP Preserve to avoid light spillage into the RMP Preserve to the greatest extent possible.

**Exhibit 5 – Modified Residential Collector Street “I” - Village 14**

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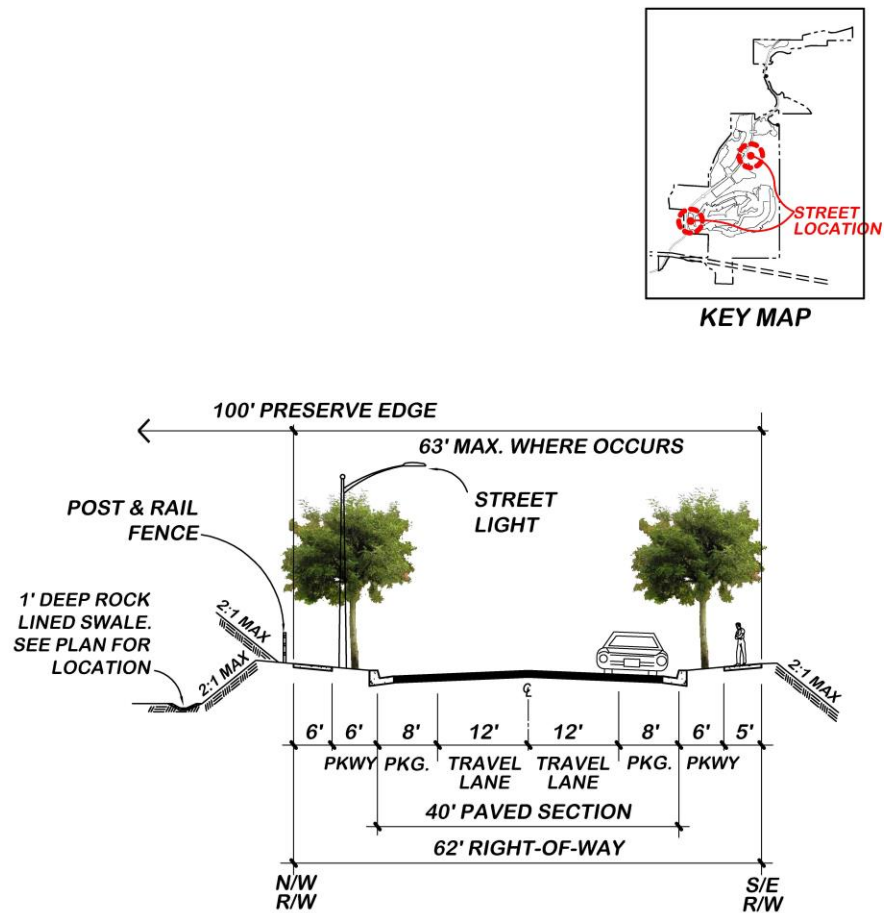


Exhibit 6 - Modified Residential Collector Streets "A" & "I" - Village 14

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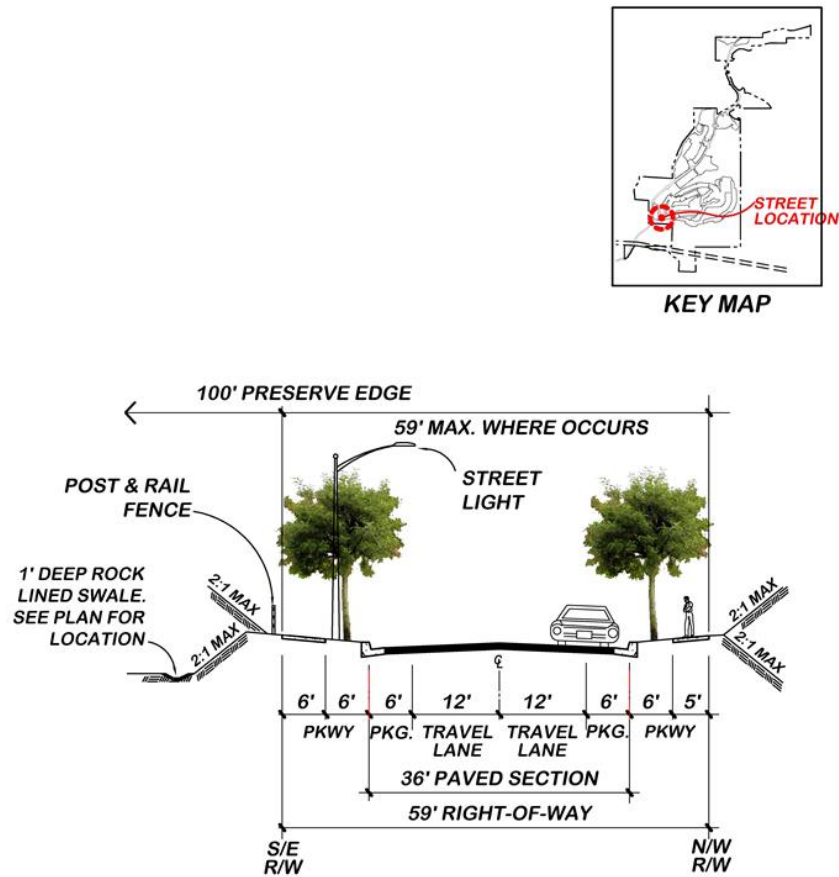
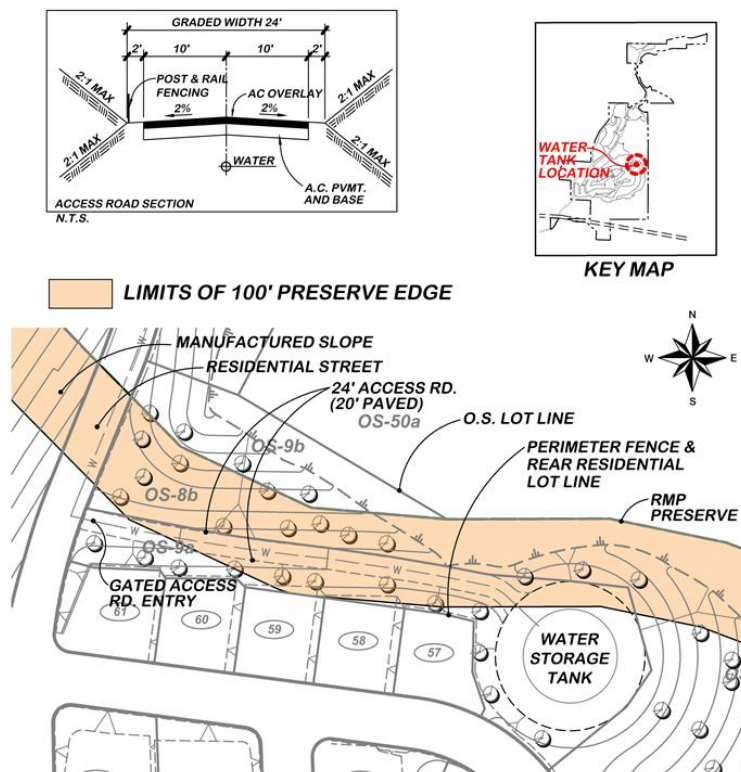


Exhibit 7 - **Modified Residential Collector Street "A" - Village 14**
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C.D. OWD WATER STORAGE TANK RESERVOIR, MAINTENANCE / ACCESS ROAD AND WATER TRANSMISSION LINE

A portion of the site for the Otay Water District (OWD) 980-Zone Reservoir, an maintenance and access road and water transmission line is proposed within the 100' Preserve Edge along the southern-southeastern edge of North-Central Village 14 to access the planned Otay Water District waterline and storage tank (Refer to Exhibit 8). The proposed road will be graded to a 24-foot width bench, with 20 feet of asphalt surface improvements and two-foot shoulders on each side. A security gate will be installed at the access driveway within neighborhood R-5. The waterline will be co-located within the paved roadway easement. Road-adjacent slopes must be planted with non-invasive, native plant materials, consistent with the existing surrounding natural vegetation (refer to Attachment A, Approved Plant List).



See Chapter VI. Internal Circulation and Reservoir Option for the OWD Reservoir/Access Road and Transmission Water Line Option

Exhibit 8 - OWD Storage Tank Water Reservoir/Access Road/Water Transmission Water Line (Village 14)

Not to scale

D.E. MAINTENANCE ACCESS AND TRAIL EASEMENTS

A portion of a Maintenance Access Easement providing access to a storm drain facility (refer to Exhibit 9) is proposed within the 100' Preserve Edge adjacent to the R-73/4 residential neighborhoods. The Maintenance Access Easement is 15 feet wide and is comprised of a 12-foot-wide asphalt/concrete surface. Post and rail fencing and a drainage "V" ditch to be provided within the easement where necessary based on final engineering design. A plantable retaining wall (8' to 16' high) (design and material to be determined during final engineering) is also planned to accommodate access to the drop structure.

The Proposed Project Amendment includes Aa 10-foot-wide Trail Easement (Perimeter Trail³) located at the perimeter of Central Village 14. is also within the 100' Preserve Edge at this location. Portions of the Perimeter Trail would be within the 100' Preserve Edge in Central Village 14, as depicted on Exhibit 18, Typical Conditions within 100' Preserve Edge. The Trail Easement is comprised of a 4 to 8-foot graded width with a 2 to 6-foot natural soil surface trail tread. Retaining walls (3' to 7' high) are within or adjacent to the Trail Easement. Post and rail fencing to be provided within the Trail Easement where necessary based on final engineering design. Refer to Exhibit 9, Maintenance Access Easement/Trail Easement/Retaining Walls at R-3/R-4 for trail details. Post and rail fencing to be provided where necessary based on final engineering design. Refer to Exhibit 16, Conceptual Fence and Wall/Access Plan and Exhibit 17, Typical Fence & Wall Details for fencing locations and fencing materials.

~~The Proposed Project includes an internal circulation option for Village 14, the Perimeter Trail Option. The Trail Easement would provide a pedestrian connection to the Perimeter Trail Option. Portions of the Perimeter Trail Option would be within the 100' Preserve Edge in Central Village 14, as depicted on Exhibit 18, Typical Conditions within 100' Preserve Edge Village 14. The Perimeter Trail Option would be comprised of a 4 to 8-foot graded width with a 2 to 6-foot natural soil surface trail tread. Retaining walls (3' to 7' high) associated with the Perimeter Trail Option would be located within the 100' Preserve Edge. Post and rail fencing to be provided where necessary based on final engineering design. Refer to Exhibit 16, Conceptual Fence and Wall/Access Plan and Exhibit 17, Typical Fence & Wall Details for fencing locations and fencing materials.~~

³ The County Board of Supervisors adopted the Perimeter Trail Option for Central Village 14 only as part of the adoption of the Approved Project; however, the South Village 14 Perimeter Trail option was not adopted.

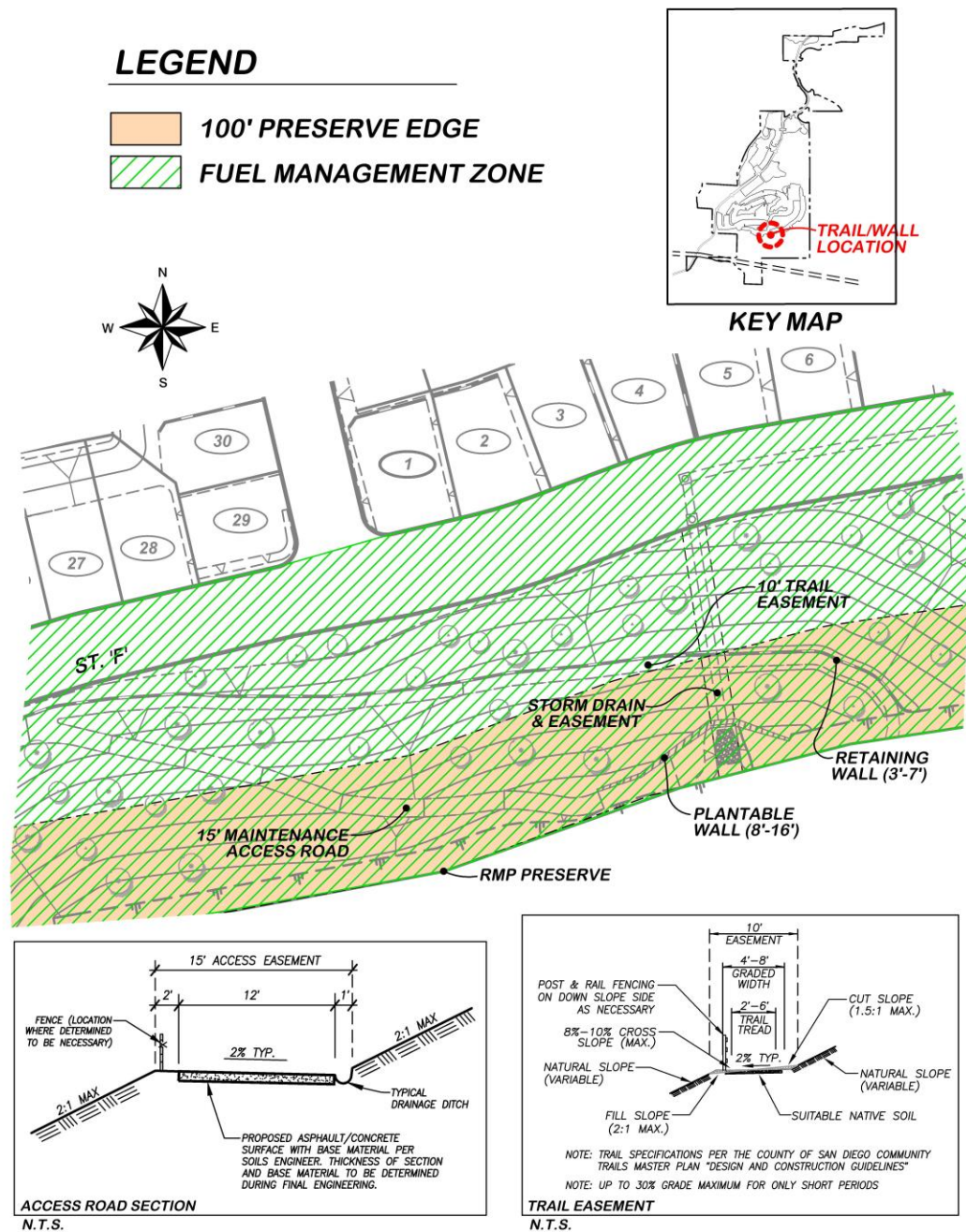


Exhibit 9 - Maintenance Access Easement/Trail Easement/Retaining Walls @ R-3/R-4 (Village 14)

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E.F. WATER QUALITY AND DRAINAGE FACILITIES

The following section describes the water quality and drainage facilities proposed within the 100' Preserve Edge. These facilities include portions of a hydromodification/water quality basin, canyon subdrains, a culvert, storm drain outlets and maintenance access roads (refer to Exhibit 10 for approximate locations).

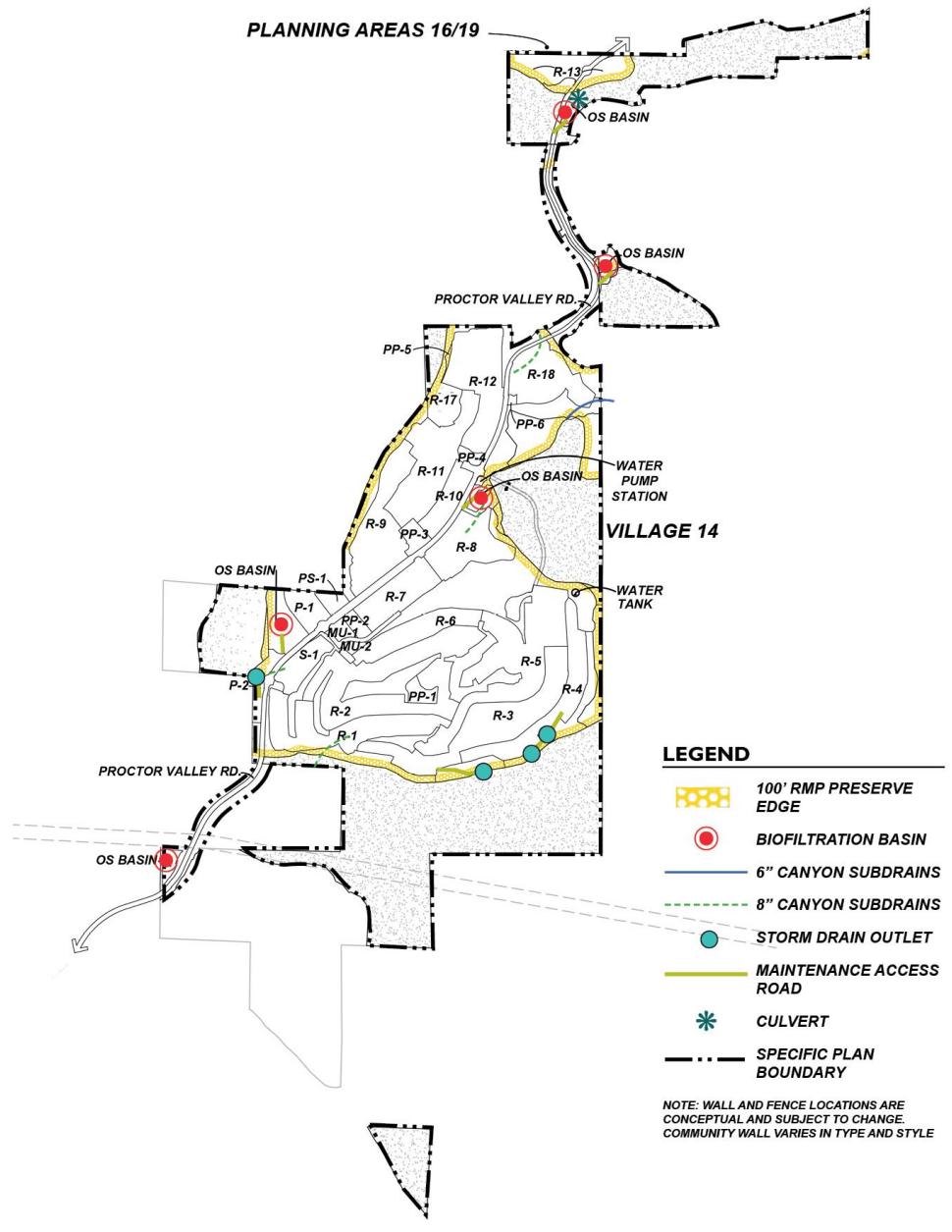


Exhibit 10 – Conceptual Water Quality and Drainage Facilities within the 100' Preserve Edge

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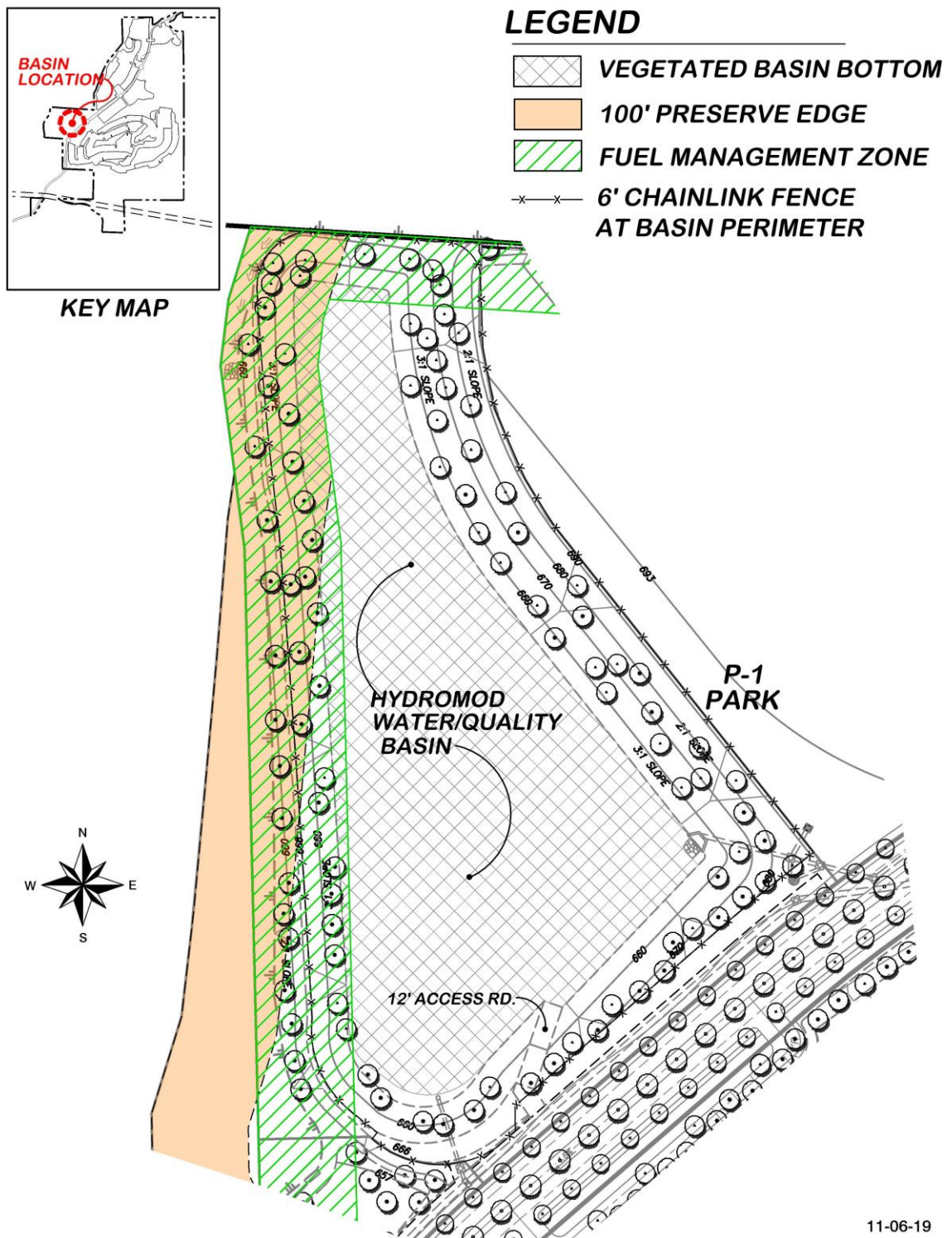
1. BIOFILTRATION BASIN

A portion of a biofiltration basin located adjacent to the P-~~12~~ public park in Central Village 14 is proposed within the 100' Preserve Edge, (refer to Exhibit 11). This area is comprised of manufactured slopes and a maintenance access road surrounding the basin. Access to this basin is provided via Proctor Valley Road.

Basin maintenance activities to be funded through an HOA or County/District. The selected maintenance entity will manage regular and any necessary additional maintenance activities, consistent with the Basin Maintenance Program to be prepared by the Applicant's Civil Engineer during the final engineering phase of the Proposed Project Amendment.

Regular maintenance activities are anticipated to occur four times a year (February, May, September and December). Rainy Season (February and December) and Pre-Rainy Season (September) maintenance activities include removal of trash, debris and excess sediment, clear clogged riser orifices and perform basin area repairs.

Post-Rainy Season maintenance includes full silt removal from the dry weather storage area, vegetation removal, annual inspections by a registered civil engineer, removal of trash, debris and excess sediment above the dry weather zone, clear clogged riser orifices and perform basin area repairs. Additional maintenance may be required following major rainfall events unless the next regularly scheduled maintenance dates are within one month of the rain event. Basins will also be inspected by a third-party fuel modification inspector as part of the annual fuel modification inspection.



2. TYPICAL CANYON SUBDRAIN DESIGN

Canyon subdrains are proposed at the perimeter of the Development Area within the 100' Preserve Edge and completely outside of the RMP Preserve, to meet the current MS-4 requirements. Subdrains are designed to capture sub-surface flows from the Development Area and outlet at the perimeter of the Development Area. One 6" and ~~five~~four 8" canyon drains are proposed within the 100' Preserve Edge (refer to Exhibit 10). The subdrain outlet is comprised of a below-grade perforated pipe, solid pipe and headwall. A solid outlet pipe and riprap are above-grade. The rip-rap to be 10-20' from the daylight point to the RMP Preserve Boundary (refer to Exhibit 12). The final design and locations of canyon subdrains will be determined during final engineering.

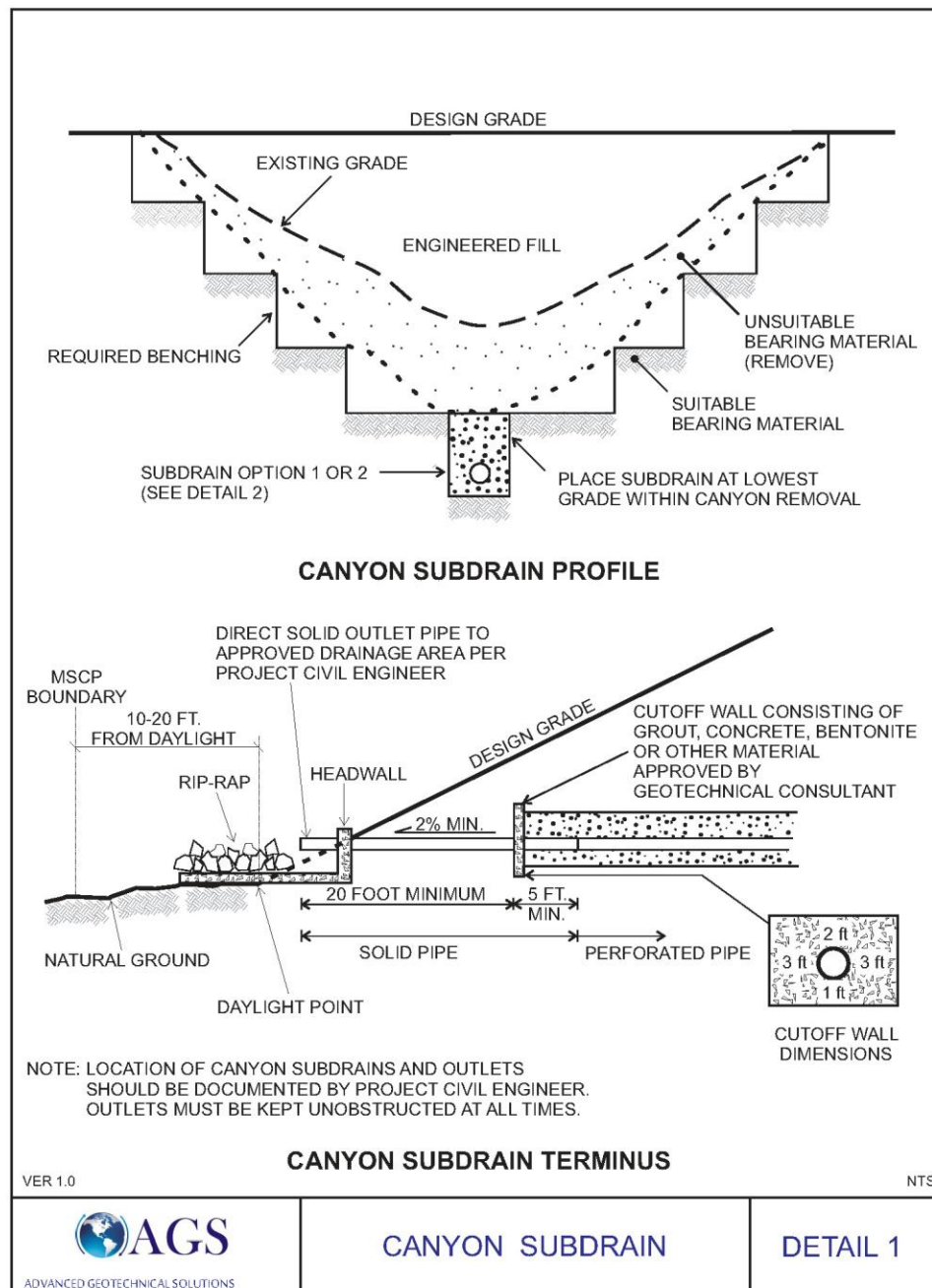


Exhibit 12 – Typical Canyon Subdrain

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3. TYPICAL STORM DRAIN OUTLET

Portions of four storm drain outlets located within Central Village 14 are proposed within the 100' Preserve Edge: ~~one within South Village 14 and four within Central Village 14~~. The typical concrete storm drain outlet includes a headwall and an energy dissipater. A 20' wide storm drain easement extends from the storm drain outlet through the 100' Preserve Edge and into the adjacent RMP Preserve.

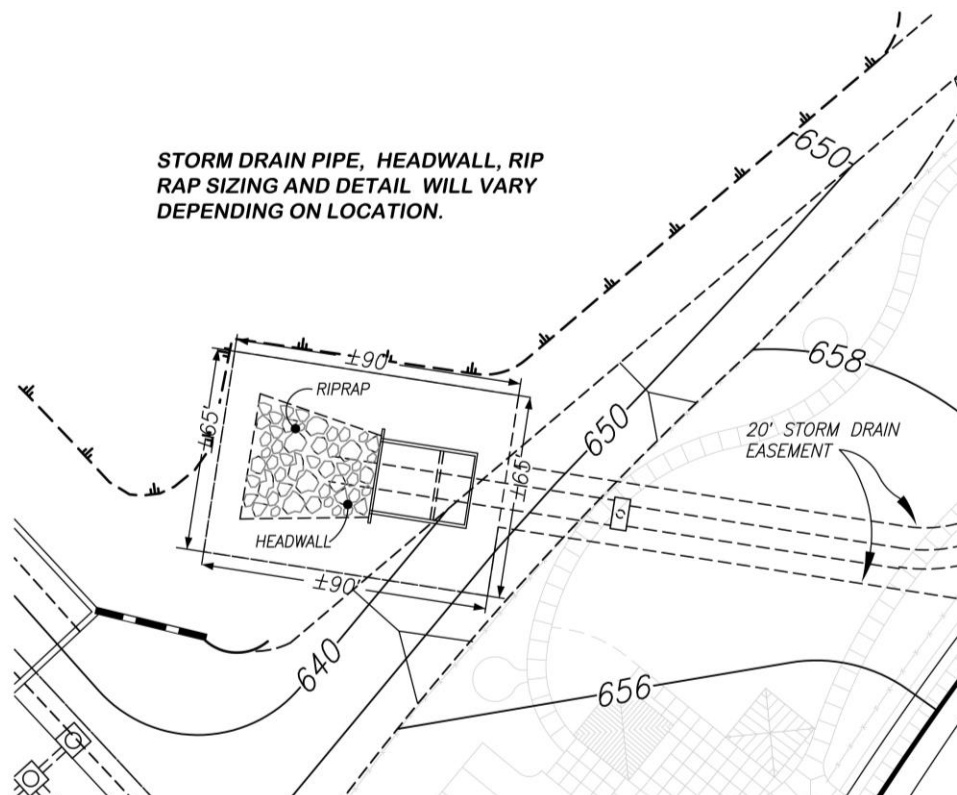
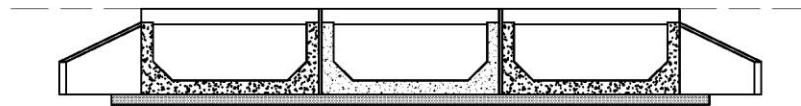
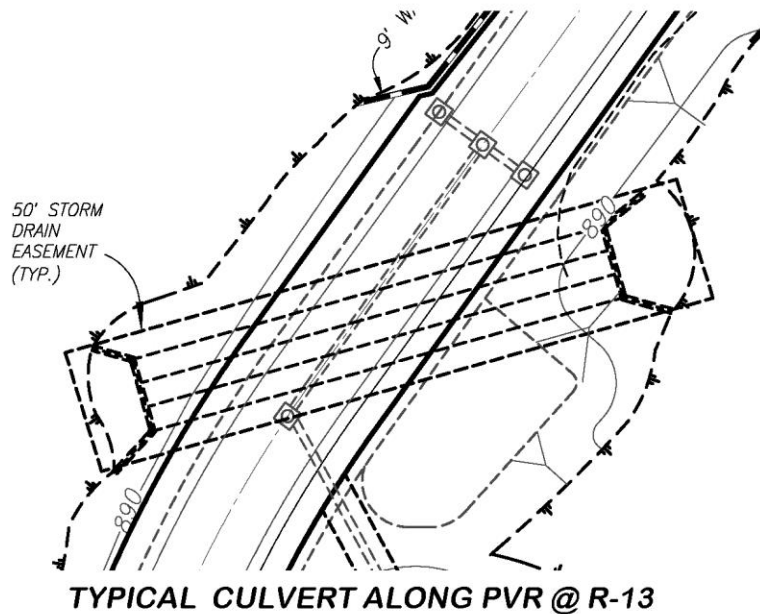


Exhibit 13 – Typical Storm Drain Outlet

Not to scale

4. TYPICAL BOX CULVERT

A box culvert crossing Proctor Valley Road is proposed within the 100' Preserve Edge within Planning Areas ~~16/~~ 19, adjacent to the R-13 neighborhood. The box culvert will be constructed consistent with County of San Diego Regional Standard Drawings.



CULVERT DETAILS AND SPECIFICATIONS WILL BE PER
SAN DIEGO COUNTY REGIONAL STANDARD DRAWINGS
WITH FINAL APPROVAL DURING COUNTY REVIEW OF
ENGINEERING CONSTRUCTION DOCUMENTS

TYPICAL BOX CULVERT

Exhibit 14 – Typical Box Culvert

Not to scale

5. TYPICAL STORM DRAIN MAINTENANCE ACCESS ROAD

Portions of maintenance access roads are proposed within the 100' Preserve Edge within ~~South, Central and North~~ Village 14. The maintenance access roads will be graded to a 15-foot wide bench, with 12 feet of asphalt or concrete surface improvements and one-foot shoulders on each side. Post and Rail fencing to be provided where necessary as determined during final engineering. An adjacent surface "V" ditch will capture flows from the road and route them to a biofiltration basin for treatment prior to release. The final location of "V" ditches will be determined during final engineering. Road adjacent slopes will be planted with non-invasive, native plant materials, consistent with the existing surrounding natural vegetation (refer to Attachment A, Approved Plant List).

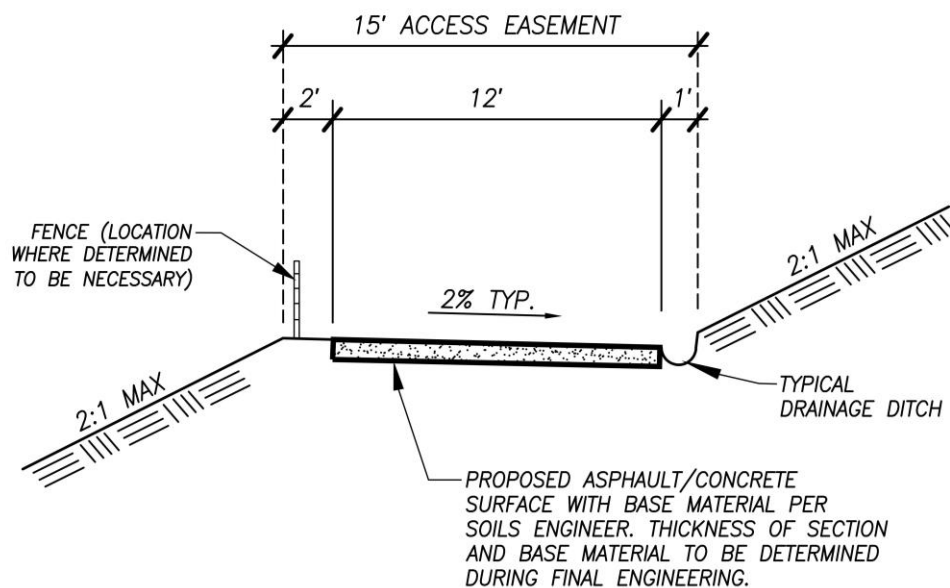


Exhibit 15 – Typical Storm Drain Maintenance Access Road

Not to scale

III. COMPLIANCE WITH RMP POLICIES AND MSCP COUNTY SUBAREA PLAN GUIDELINES

The following discussion provides a description of Otay Ranch GDP/SRP and RMP policies, as well as additional MSCP County Subarea Plan guidelines and proposed compliance. The discussion is divided into adjacency issue areas.

The MSCP County Subarea Plan, Chapter 1, Section 1.10. *Land Uses Adjacent to the Preserve*, “The following guidelines [A-E] will be used when planning and implementing uses and activities when located immediately adjacent to the preserve. These guidelines are meant to ensure compatibility with the preserve.”

The Otay Ranch RMP, Objective 7 – Resource Preserve – Adjacent Land Uses, identifies allowable uses adjacent to the Preserve in Policies 7.1 and 7.2, Guidelines 1-6. In addition, Policy 7.3 provides guidance intended to minimize/avoid impacts to sensitive resources within the adjacent RMP Preserve during construction.

A. LANDSCAPE MATERIALS

MSCP County Subarea Plan (Chapter 1, Section 1.10.) - Guideline:

Where feasible, plant materials used to landscape manufactured open space, road cuts/fills and recreational facilities should consist of native species similar/compatible with the adjacent habitat in the preserve. If possible, those species should be based on plants with genetic materials of the area.

Otay Ranch RMP (Policy 7.2) Guidelines:

- 1) The edge plan shall be prepared in consultation with a qualified biologist to ensure that proposed land uses will not adversely affect resources within the Preserve.
- 2) The edge plan shall include a list of plant species that may and may not be used for landscaping within the edge.

Compliance:

The Approved Plant List (Attachment “A”) has been prepared for the Proposed Project Amendment in consultation with a qualified biologist (Brock Ortega, Dudek) and an urban forester and fire protection planner (Michael Huff, Dudek). The Approved Plant List includes a list of approved plants that may be utilized within the 100’ Preserve Edge. Landscape plans for areas within the 100’ Preserve Edge may not contain invasive species and must include local native species, consistent with the Approved Plant List. No invasive species will be utilized within or adjacent to stormwater structural BMPs that might eventually drain into the RMP Preserve. Landscape areas within the 100’ Preserve Edge including, but not limited to, manufactured slopes, biofiltration basins, street-adjacent landscaping and parks, must comply with the Approved Plant List.

The Approved Plant List is consistent with FPP requirements, as the 100’ Preserve Edge is also typically within the 100’ Fuel Modification Zone. Any proposal to utilize plant material not listed on the Approved Plant List must be reviewed by a

qualified biologist and reviewed and approved by the Development Services Director and the San Diego County Fire Authority (SDCFA). The area may be planted with container stock (liners) or a hydroseed mix. See the FPP for landscape planting and irrigation requirements.

B. USES WITHIN THE PRESERVE EDGE

MSCP County Subarea Plan (Chapter 1, Section 1.10.) Guideline:

B. Areas and structures subject to heavy human uses (e.g. ball fields, parking lots, hardscapes/play courts, equestrian centers, staging areas, etc.) shall, to the extent feasible, be located away from the edge of the preserve.

Otay Ranch RMP (Policy 7.2) Guideline:

- 4) Development adjacent to the edge shall be restricted to development types that are least likely to impact specific adjacent biological resources.
- 5) Landscaping or block walls shall be used in appropriate areas adjacent to the edge to reduce impacts of noise and light.
- 6) No structures other than fencing and walls shall be allowed, and these shall be built and landscaped in such a way as to minimize visual impacts on the Preserve and [Otay Valley Regional Park Plan] OVRP.

Compliance:

The Specific Plan Amendment –proposes an Active Lifestyle and Wellness recreational theme centered on a comprehensive neighborhood park system that provides a variety of active recreation opportunities. The Specific Plan Amendment distributes public and private park facilities throughout the Proposed Project Amendment to ensure park facilities will be located within ½ mile of residences (Village 14 only). There are ~~three-two~~ public neighborhood parks proposed within the Village 14. ~~Although not a requirement of the Otay Ranch GDP/SRP, a public park is also proposed within Planning Area 16.~~ Conceptual park plans have been designed to orient active uses away from the RMP Preserve to the greatest extent possible, given design constraints.

The P-~~32~~ neighborhood park is located within Central Village 14 and is planned to include open lawn areas, a large and small dog park, shaded picnic areas, ~~a yoga pavilion~~, parkour stations, a restroom/maintenance building and ~~two-a small~~ parking lots. A portion of the P-~~32~~ public neighborhood park is designed with passive uses which will be within the 100' Preserve Edge, including landscaped slopes, a passive lawn area and a walking path planned along the edge of the park. Lawn areas will be configured to accommodate informal activities and are not intended for organized sports. ~~A portion of the Private Rural Residential Road that provides access to the R-12 residential neighborhood will also be located within the 100' Preserve Edge.~~ There are no structures planned within the 100' Preserve Edge.

~~The P-4 Park, located within Planning Area 16, is planned as a passive park with landscaped areas, a perimeter path, shaded picnic areas, an open lawn area and a small parking lot. The portion of the P-4 Park located within the 100' Preserve Edge includes a landscaped area.~~

The P-1 ~~and P-2~~ public neighborhood parks ~~will be~~ located within Central Village 14, located outside of the 100' Preserve Edge. ~~The P-1 Park will be located within South Village 14 and includes active recreation facilities, including sport courts, an open lawn area, shaded picnic areas, a restroom/maintenance building and a parking lot. The P-1 Park will also include an easement for potential trail access.~~ The P-21 Park is located in Central Village 14 and will include youth soccer fields, shaded picnic shelters, a basketball court, parkour stations, a restroom/maintenance building, a park maintenance yard, a plaza area with a raised stage, a shaded tot lot and a parking lot.

All public parks will be maintained and operated by the County Parks and Recreation Department. Programming of recreation activities within the public parks, including portions of the neighborhood parks within the 100' Preserve Edge, will be under the control of the County Parks and Recreation Department, which will determine where active recreational uses may occur.

Community walls are planned at the perimeter of the Project Area, consistent with the Approved Project Village 14 and Planning Areas 16/19 Acoustical Analysis and the FPP Fire Protection Plan and the Noise Technical Memorandum for the Otay Ranch Village 14 and Planning Areas 16/19 Proposed Project Amendment and Fire Protection Technical Memorandum – Otay Ranch Village 14 and Planning Areas 16/19 Proposed Project Amendment. Perimeter walls are intended to create a barrier between development and the RMP Preserve. Appropriate signage will be posted notifying the public of RMP Preserve access restrictions. (refer to Exhibit 16, Conceptual Fence and Wall/Access Plan, for perimeter wall locations.)

C. LIGHTING

MSCP County Subarea Plan (Chapter 1, Section 1.10.) - Guideline:

- A. Lighting within 100 feet of the preserve edge shall be confined to areas necessary to ensure public safety, and shall be limited to low pressure sodium fixtures, shielded and directed away from the preserve where possible.

Otay Ranch RMP (Policy 7.2) Guidelines:

- 1) The edge plan shall be prepared in consultation with a qualified biologist to ensure the proposed land uses will not adversely affect resources within the Preserve.
- 4) Development adjacent to the edge shall be restricted to development types that are least likely to impact specific adjacent biological resources.
- 5) Landscaping or block walls shall be used in appropriate areas adjacent to the edge to reduce impacts of noise and light.

Compliance:

The Village 14 Design Plan and Planning Areas ~~16/~~19 Design Guidelines include criteria for the design of lighting within the Preserve Edge.

Improvement plans for the areas within the 100' Preserve Edge will include shielded lighting designs and landscaping that avoid spillover light in the RMP Preserve. Lighting Plans and a photometric analysis shall be prepared in conjunction with improvement plans for development areas adjacent to the RMP Preserve to illustrate the location of proposed lighting standards, type of shielding measures and landscaping. Lighting Plans and accompanying photometric analyses must also be prepared in conjunction with street and other improvements proposed within the Preserve Edge to demonstrate that light spillage into the RMP Preserve is avoided to the greatest extent possible.

Public park hours of operation will be limited to daylight hours and will be enforced and controlled by the County Parks and Recreation Department. Sports fields within public parks will not be lit for nighttime use. All proposed landscape lighting within public parks shall be designed to eliminate light spillage into adjacent RMP Preserve areas. All lighting must comply with the County of San Diego Code of Regulatory Ordinances, 51.201 to 51.209, Light Pollution Code.

D. ACCESS CONTROLS

MSCP County Subarea Plan (Chapter 1, Section 1.10.) - Guideline:

D. Fencing along the preserve boundary is desirable but not mandatory and may provide a barrier to fire, invasive species, and uncontrolled human access. Should a landowner or preserve management decide to install fencing, the type, style and height must conform to existing regulations or those included in the applicable Specific Plan.

Otay Ranch RMP (Policy 7.2) Guidelines:

5) Landscaping or block walls shall be used in appropriate areas adjacent to the edge to reduce impacts of noise and light.

6) No structures other than fencing and walls shall be allowed and those shall be built and landscaped in such a way as to minimize visual impacts on the Preserve and the OVRP.

Standard: Public access may be restricted within and adjacent to wetlands, vernal pools, restoration areas, and sensitive wildlife habitat (e.g., during breeding season) at the discretion of the Preserve Owner/Manager [POM].

Guidelines:

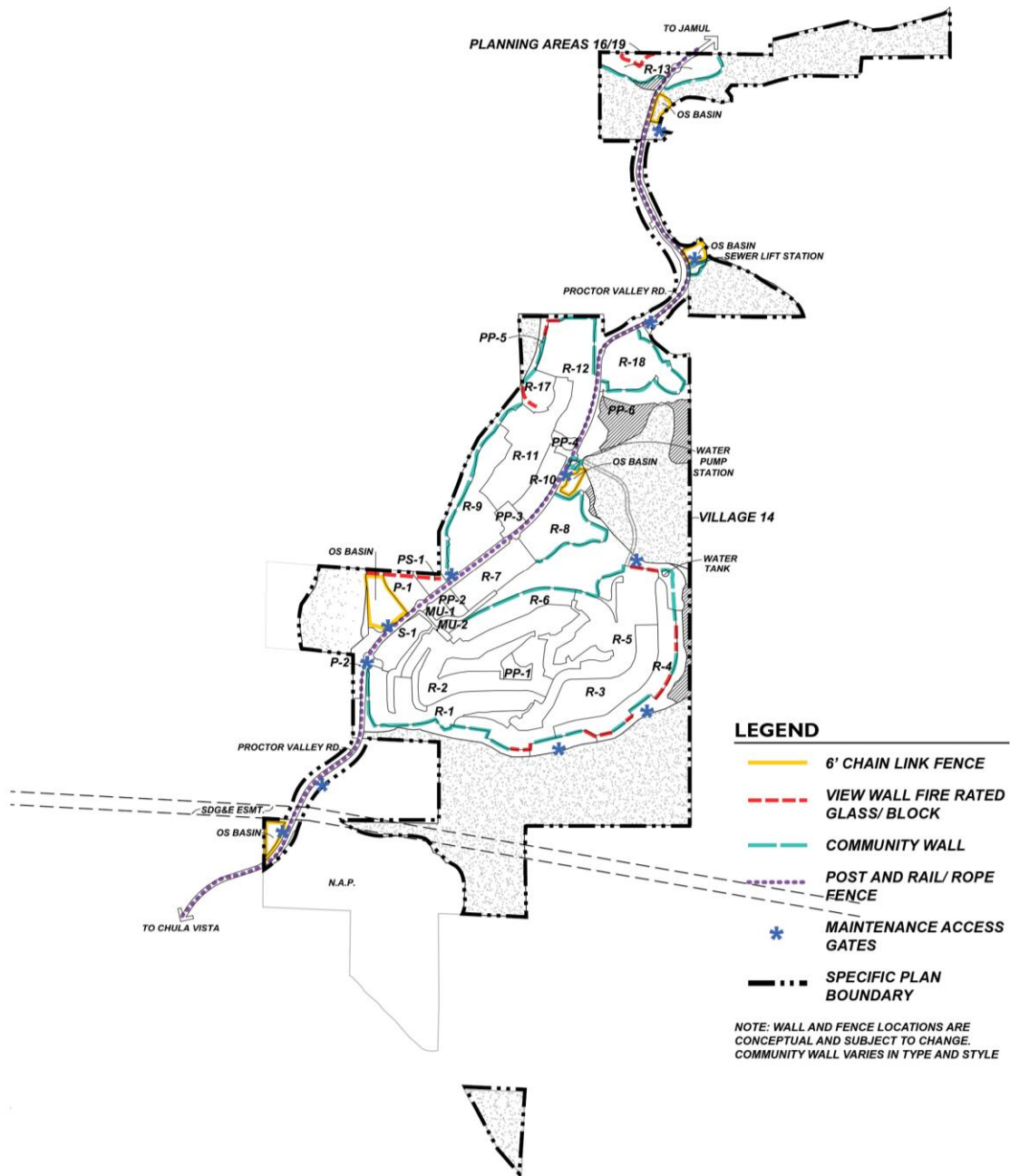
1. The Preserve Owner/Manager shall be responsible for identifying and designating restricted areas based on biological sensitivity.

Compliance:

Pursuant to RMP requirements and MSCP County Subarea Plan guidelines, the Proposed Project Amendment will provide access to the RMP Preserve at designated locations (refer to Exhibit 16, Conceptual Fence and Wall/Access Plan). Walls and fences will be constructed outside the RMP Preserve, within the Preserve Edge/Fuel Modification Zone and will be maintained by the Master HOA or the County landscape monitoring firm. Homeowners may be

responsible for maintaining the interior of perimeter walls and fences, pursuant to the CC&Rs. Perimeter fencing/walls will be located outside of the watershed, including the watershed of existing vernal pools located within the RMP Preserve.

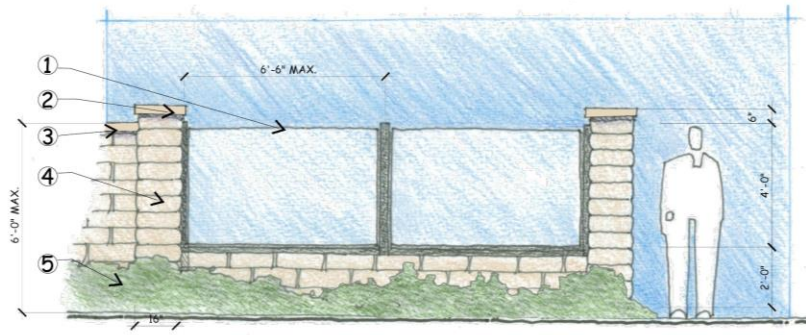
Access to the Fuel Modification Zone for maintenance and fire protection activities is provided approximately every 1,000' along the perimeter. Refer to Exhibit 16, Conceptual Fence and Wall/Access Plan and Exhibit 17, Typical Fence & Wall Details for fencing locations and fencing materials. Perimeter walls are intended to create a barrier between development and the RMP Preserve. Appropriate signage will be posted notifying the public of RMP Preserve access restrictions.



Note: Post and Rope Fencing may be implemented along Proctor Valley Road. However, Post and Rail Fencing will be implemented in other locations depicted on Exhibit 16.

Exhibit 16 – Conceptual Fence and Wall/Access Plan

Not to scale



VIEW WALL WITH GLASS

LEGEND

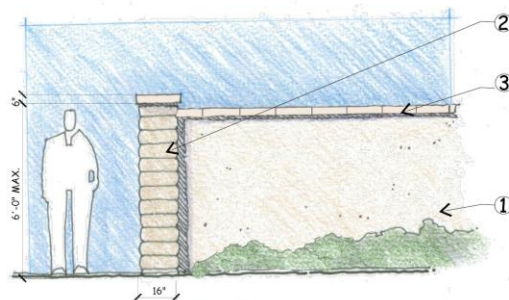
- ① TEMPERED FIRE RATED GLASS
- ② 18" SQ. PILASTER CAP
- ③ 8" WIDE CONCRETE CAP
- ④ 16" SQ. SLUMPSTONE PILASTER
- ⑤ 6" WIDE SLUMPSTONE WALL



VIEW WALL WITH TUBULAR STEEL

LEGEND

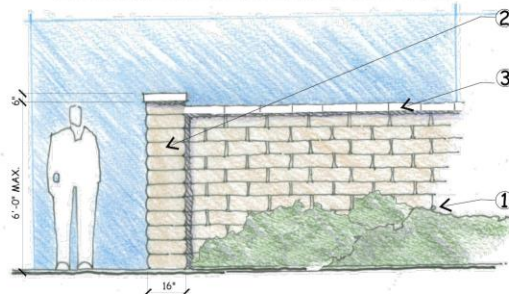
- ① TUBULAR STEEL
- ② 18" SQ. PILASTER CAP
- ③ 8" WIDE WALL CAP
- ④ 16" SQ. SLUMPSTONE PILASTER
- ⑤ 6" WIDE SLUMPSTONE WALL



PERIMETER WALL AND PILASTER

LEGEND

- ① SLUMP BLOCK - AVAIL. THROUGH ORCO BLOCK, WITH SACK FINISH
- ② 16" SQ SLUMPSTONE PILASTER
- ③ CAP

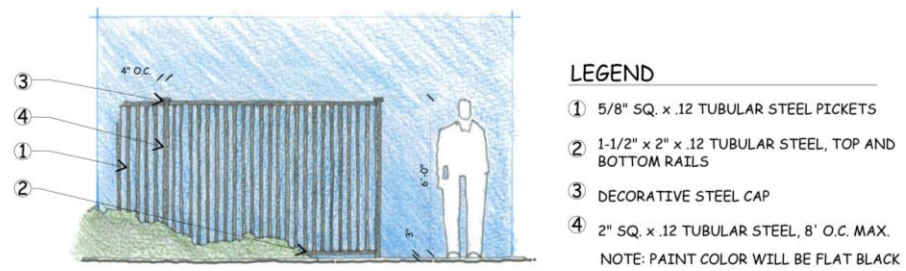


ENHANCED WALL AND PILASTER

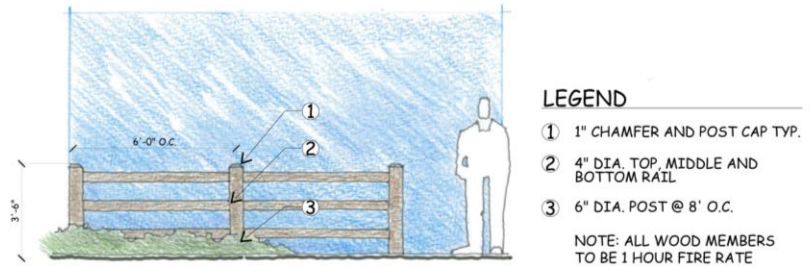
LEGEND

- ① SLUMP BLOCK - AVAIL. THROUGH ORCO BLOCK COLOR LA PAZ
- ② 16" SQ SLUMPSTONE PILASTER
- ③ CAP

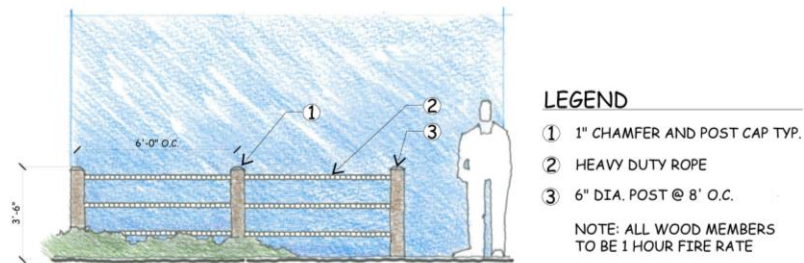
Exhibit 17 – Typical Fence and Wall Details



PRODUCTION VIEW FENCE



POST AND RAIL FENCE



OPTIONAL POST AND ROPE FENCE

*Tempered Fire Rated Glass used in locations per Fire Protection Plan requirements.

Exhibit 17 – Typical Fence and Wall Details (cont'd)

E. BUFFERS

MSCP County Subarea Plan (Chapter 1, Section 1.11.) - Guideline:

E. There shall be no requirements for buffers outside the preserve system. All open space requirements for the preserve system shall be incorporated into the preserve system.

The MSCP County Subarea Plan also states in Chapter 3, Section 3.4.2 *Specific Project Requirements*:

Otay Ranch: Allowable uses for areas adjacent to the preserve are discussed in Policies 7.1-7.3 of the Otay Ranch RMP. The edge of the preserve is defined as a strip of land 100 feet wide that surrounds the perimeter of the Management Preserve.

Otay Ranch GDP/SRP Objective:

Identify allowable uses within appropriate land use designations for areas adjacent to the Preserve.

Policy: All development plans adjacent to the edge of the Preserve shall be subject to review and comment by the Preserve Owner/Manager, the City of Chula Vista, and the County of San Diego to assure consistency with resource protection objectives and policies.

Policy: "Edge Plans" shall be developed for all SPAs that contain areas adjacent to the Preserve. The "edge" of the Preserve is a strip of land 100 feet wide that surrounds the perimeter of the Preserve. It is not a part of the Preserve, it is a privately or publicly owned area included in lots within the urban portion of Otay Ranch immediately adjacent to the Preserve.

Compliance:

The preparation of this Amended Preserve Edge Plan fulfills the requirement to develop an "Edge Plan" for any Specific Plan Area adjacent to the RMP Preserve and is subject to review and comment by the City of Chula Vista and County of San Diego acting jointly as the POM. Uses within the 100' Preserve Edge will be privately or publicly owned and maintained. Consistent with RMP policies and MSCP County Subarea Plan guidelines, the Specific Plan Proposed Project Amendment will establish a 100' Preserve Edge outside of the RMP Preserve.

F. FUEL MODIFICATION ZONES (FMZ)

MSCP County Subarea Plan (Chapter 1, Section 1.11.)- Guidelines:

The following guidelines are intended to establish how the fuel modification zone will be managed.

- A. Plant materials existing within the fuel modification zone may be thinned, mowed, pruned and/or removed as necessary to maintain a low fuel load condition.

- B. Supplemental planting may be elected by the owner. Plant materials used shall be acceptable to the appropriate fire agency and non-invasive. This guideline also applies to any road cuts and/or graded/disturbed areas within the fuel modification zone.
- C. Ownership of the fuel modification zone may vary. In most cases, it may be by the adjacent lot owner or homeowners' association. Where appropriate, the zone may be incorporated into project open space and landscape plans.
- D. Responsibility for brush management will vary according to the specific requirements of the approved project. In most cases, it shall reside with the landowner or homeowners' association. For residential areas, the Codes, Covenants and Restrictions (CC&Rs) shall clearly define the responsibilities of the owner with respect to fuel modification including when and how such activities shall be carried out.
- E. Fencing, lighting and signage are permitted in the fuel modification zone, at the discretion of the landowners.
 - 1. Lighting shall be confined to areas necessary to ensure public safety, and shall be limited to low pressure sodium fixtures, shielded and directed away from the preserve.
 - 2. Fencing is desirable but not mandatory and provides a barrier to fire, invasive species, and uncontrolled human access. Should a landowner decide to install fencing anywhere within the brush management zone, the type, style and height must conform to existing regulations.

MSCP County Subarea Plan Guideline (Chapter 3, Section 3.4.3. Fuel Modifications)

General principles for design and management of the fuel modification zone are contained in Chapter 1, Section 1.11. Within the SCS [South County Segment], Otay Ranch is required to produce Fuel Management Zone Plans on a SPA by SPA basis. To the extent that these plans may effect preserve resources, they must be consistent with County MSCP standards.

Otay Ranch RMP (Policy 7.2) - Guideline

3) Fuel modification zones may be incorporated into the edge.

Compliance:

Fuel Modification Zones will be incorporated into the Development Area pursuant to the requirements of the MSCP County Subarea Plan. Where appropriate, graded landscaped slope areas will be maintained pursuant to SDCFA requirements and will be outside of the RMP Preserve. A-The Otay Ranch Village 14 and Planning Areas 16/ 19 - Fire Protection Plan for the Approved Project was approved by the County on 6/26/19. Dudek prepared the Fire Protection Technical Memorandum – Otay Ranch Village 14 and Planning

Areas 16/19 Proposed Project Amendment (December 2019). ~~These documents FPP has been prepared and~~ provides specific fuel modification requirements for the for the Proposed Project Amendment. Consistent with the MSCP County Subarea Plan requirements, a 100' Fuel Modification Zone has been established and coincides with the 100' Preserve Edge. In addition to the 100' Fuel Modification Zone, rear yards on private lots are to be irrigated landscapes, extending the modified fuel areas by an average of 20 feet (Zone 1a). Any supplemental planting proposed by homeowners will be shown on landscape plans which are subject to review and approval of the HOA Landscape and Architectural Committee, subject to the CC&Rs.

Refer to Exhibits 19 to 27 for the depiction of the Fuel Modification Zone.

a. *FUEL MODIFICATION ZONES (VILLAGE 14)*

Zone 1a: FMZ 1a is the first 20 feet (rear yard) from the structure to the lot line in the Village 14 area. This area will be included in the overall site reduced fuel zones. Homeowners will be responsible for ensuring that rear-yard landscaping is compliant with the FPP. The Proposed Project Amendment's HOA will include an architectural/landscape committee responsible for review and approval of landscape plans and required to provide ongoing education to homeowners regarding fire adapted landscape maintenance.

Zone 1: Public and private areas located from the lot lines to 50 feet outward. These areas may be located on publicly maintained slopes, private open space lots, public streets, and/or private yards.

Some perimeter lots receive extended Zone 1 FMZs on manufactured slopes or internal fire-safe common area landscaping. These 100-foot-wide FMZs exceed the code requirement by providing low fuel densities and irrigated fuels for the entire 100 feet versus 50 feet of irrigated and 50 feet of non-irrigated thinned areas.

- This irrigated high plant moisture zone shall be serviced by a permanent, automatic irrigation system that keeps plants hydrated via efficient drip irrigation.
- No tree limb encroachment within 10 feet of a structure or chimney, including outside barbecues or fireplaces.
- Minimum 10 feet between tree canopies.
- Tree maintenance includes limbing-up (canopy raising) 6 feet or one-third the height of a mature tree.
- Additional trees (excluding prohibited or highly flammable species) may be planted as parkway trees on single loaded streets.
- 75% of all groundcover and sprawling vine masses shall be limited to a maximum height of 18 inches.

- 25% of all groundcover and sprawling vine masses may reach a maximum height of 24 inches.
- Groundcovers must be of high-leaf moisture content.
- Shrubs shall be less than 2 feet tall, on 5-foot centers.
- Randomly placed approved succulent type plant material may exceed the height requirements, provided they are spaced in groups of no more than three and a minimum of 5 feet away from described “clear access routes.”
- Vegetation/Landscape Plans shall be in compliance with the FPP.

Zone 2: Public and private areas located between the outside edge of Zone 1 and 50 feet outward to a minimum 100 feet. These areas may be located on public slopes, private open space lots and public streets, and are subject to the criteria provided below:

- Represents a 50% thinning zone – 50% less fuel than on adjacent unmaintained RMP Preserve areas. Zone 2 areas will include removal of dead/dying vegetation, exotics, and plant species listed on the Prohibited Plant List. Removal of these components will result in 50% thinning of the existing fuels. As necessary to meet the 50% thinning objective, other plants will be removed to create a mosaic of vegetation with adequate spacing and discontinuity.
- All manufactured slopes within this area will be serviced by a temporary, aboveground automatic irrigation system that will be turned off by the HOA or the County’s landscape monitoring firm once the plantings are established but will remain in place.
- Trees may be located within this zone, provided that they are planted in clusters of no more than three. A minimum distance of no less than 20 feet shall be maintained between the tree cluster’s mature canopies. The trees will be limbed up to maintain vertical separation from understory shrubs.
- Only three trees on the Approved Plant List and/or those approved by a qualified biologist shall be allowed within this zone.
- 75% of all groundcover and sprawling vine masses shall be limited to a maximum height of 36 inches.
- 25% of all groundcover and sprawling vine masses may reach a maximum height of 48 inches.
- Randomly placed approved succulent type plant material may exceed the height requirements, provided that they are spaced in groups of no more than three.
- Single specimen native shrubs, exclusive of chamise and sage, may be retained on 20-foot centers.

A more detailed description of the Fuel Modification Zone, including maintenance activities, planting programs, etc. is provided in the FPP. A portion of Zone 1 may be incorporated into streets, parks and other areas, as appropriate. Any proposed changes in the Fuel Modification Zone are subject to approval by the Development Services Director and the SDCFA.

The 100' Preserve Edge coincides with the 100' Fuel Modification Zone in portions of the Development Area. Where the edge condition involves streets adjacent to the RMP Preserve, hard surface and irrigated landscaped areas would serve as wildland fire buffers, in accordance with specific requirements of the FPP.

The irrigation design proposed for the Preserve Edge includes permanent irrigation within Fuel Modification Zone 1 (0-50 feet) and temporary irrigation in Zone 2 to ensure the establishment of vegetation intended to stabilize the slope and minimize erosion. Temporary irrigation is described below.

Zone 2 (51 – 100 feet) would be irrigated with above ground irrigation lines utilized only during plant establishment using sprinkler heads that spray 360 degrees. When the plants have become established, the sprinkler heads will be adjusted to provide adequate coverage within the upper 50 feet (Zone 1) of the slope.

b) FUEL MODIFICATION ZONES (PLANNING AREAS ~~16/~~ 19)

The layout of the building structures on the large estate ~~and-ranchette~~ lots in Planning Area ~~s-16/~~ 19 cannot be determined at this time. Therefore, the FMZ depicted on the Revised Tentative Map is an interim condition until the building structures are sited on the lots at building permit. The interim FMZ may be modified by SDCFA at building permit issuance. Additionally, Planning Areas ~~16/~~ 19 will include both 100 foot wide FMZs and areas designated as Limited Building Zones (LBZ). The following requirements and criteria will be implemented in Planning Areas ~~16/~~ 19 only:

1. Primary Residence: will include 100 feet of FMZ in all directions to the property lines. Unless alternative materials or methods are approved by SDCFA, it is anticipated that neighboring properties will include overlapping FMZ areas, so the outer portion of a lot's FMZ may be provided by a reciprocal FMZ on a neighboring property, similar to a typical tract. The Planning Area ~~16/~~ 19 CC&Rs will provide for reciprocal/overlapping FMZ easements and enforcement.
2. Small Accessory Structures: consistent with the fire code, accessory structures that are less than 250 square feet and 30 feet or more from the primary residence are not considered structures with regards to providing additional fuel modification. They will be allowed within the 100 feet FMZ provided for the primary residence, if they meet all other applicable

- requirements. If 250 square feet or larger, or within 30 feet of the primary residence, then the FMZ will be extended from the structure outward.
3. Large Accessory Structures: Accessory structures that are 250 square feet or larger, regardless of their location, will be required to provide 100 feet of FMZ in all directions, unless alternative materials or methods are approved by SDCFA. The 100 feet of FMZ may include on-site FMZ, or a combination of on-site FMZ and off-site FMZ associated with neighboring property FMZs (reciprocating/overlapping FMZs). Where these options are not possible, such as when there is no off-site FMZ and a project cannot achieve a 100-foot-wide FMZ on site, then the property owner may submit to SDCFA and Planning & Development Services (PDS) for review a focused FPP indicating the building details, a site map with available FMZ measurements, and proposed mitigations for the reduced FMZ. Mitigations may include measures or combinations of measures including, an off-site FMZ easement from neighbor(s), building hardening, more restrictive FMZ (lower plant density), non-combustible ground cover, heat-deflecting landscape walls, or other measures.
 4. Limited Building Zone: A Limited Building Zone will be required on portions of all large lots adjacent to the RMP Preserve in Planning Areas 16 and 19. The Limited Building Zones will restrict the construction of accessory structures or other buildings within 100 feet of the RMP Preserve.
 5. ~~Lots 15 & 16 in Planning Area 16 include a mitigating condition for a heat-deflecting landscape wall on the eastern sides due to the potential inability to achieve a full 100 feet of FMZ. Depending on the placement of a residence on these lots, a 6-foot tall, masonry wall will be placed at the top of slope on the edge of the building pad to augment the achievable FMZ. It is estimated that FMZs will be a minimum of 70 feet wide for these two lots.~~

G. TEMPORARY CONSTRUCTION IMPACTS TO THE RMP PRESERVE

Otay Ranch RMP (Policy 7.3):

Protect and maintain biological integrity of unconveyed land adjacent to developing SPAs.

Standards:

1. Provide temporary fencing around perimeter sensitive habitat areas and/or areas occupied by sensitive species adjacent to any SPA under construction to inhibit encroachment by construction traffic, etc.
2. Phase construction of SPAs immediately adjacent to sensitive biological resources to avoid indirect impacts. For example, construction activities that equal or exceed volume levels that inhibit breeding and nesting activities of the California gnatcatcher should be curtailed during the nesting period of the bird.

Compliance:

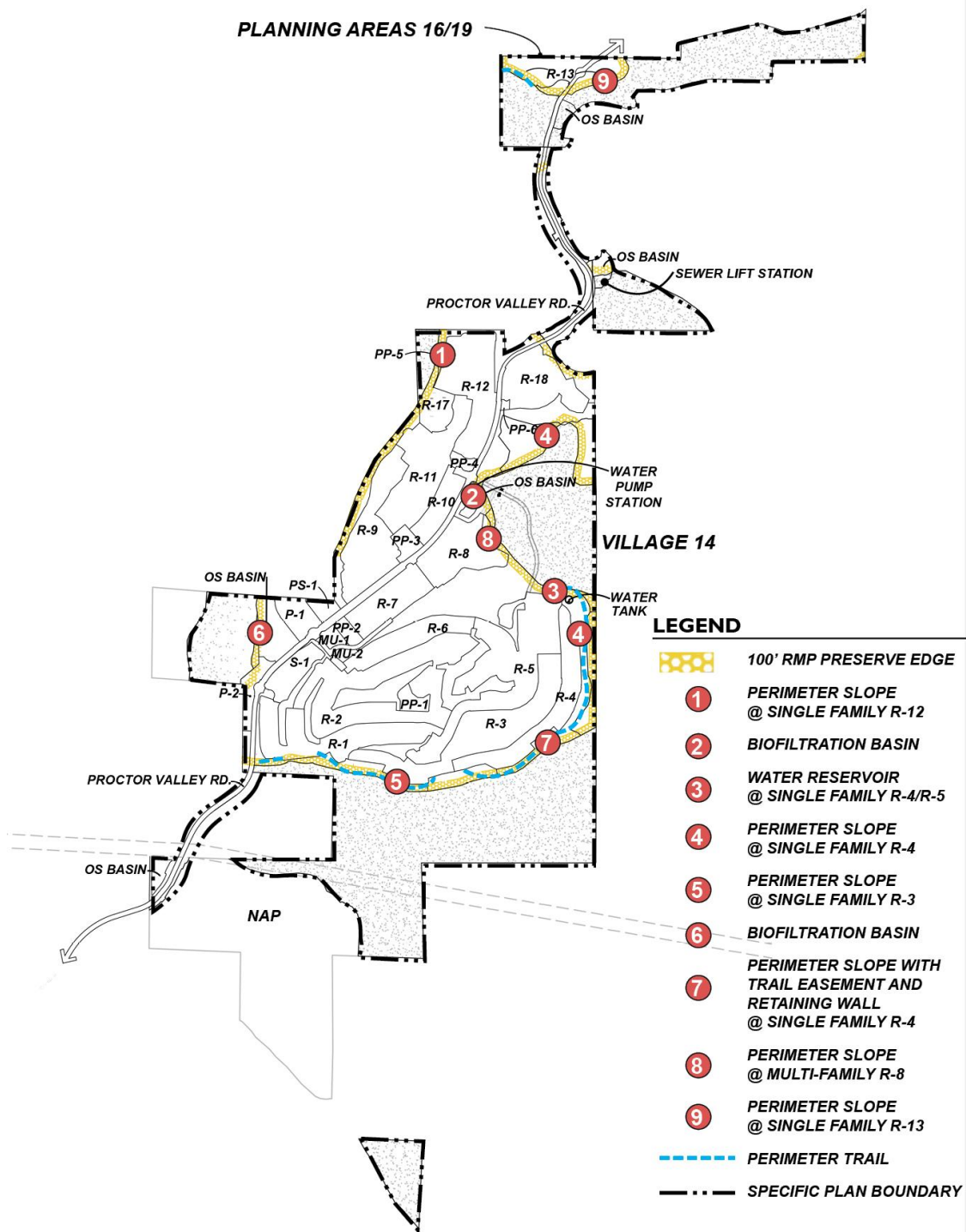
Consistent with Otay Ranch RMP Policy 7.3, Standards 1 and 2 listed above to be implemented during construction activities adjacent to the RMP Preserve. Further, the ~~Village 14 and Planning Areas 16/19~~ Certified EIR (16-19-006) ~~will~~ analyzed potential temporary direct and indirect impacts associated with construction activities, including impacts related to or resulting from the generation of fugitive dust; changes in hydrology resulting from construction, including sedimentation and erosion; the introduction of chemical pollutants; noise; lighting; non-native invasive species; increased human activity; alteration of the natural fire regime; and shading. The Certified EIR ~~will~~ includes mitigation measures to mitigate potential significant impacts and the Proposed Project Amendment will be required to implement these same mitigation measures.

H. TYPICAL CONDITIONS AT THE PRESERVE EDGE

There are ~~13-9~~ typical conditions within the 100' Preserve Edge along the perimeter of the Project Area (refer to Exhibit 18 – Typical Conditions within 100' Preserve Edge –for the locations of the typical conditions. ~~“Typical Conditions” 1 through 9 are within the Village 14 perimeter and 10 through 13 are within the Planning Areas 16/19 perimeter.~~ Refer to Exhibits 19 through 27 for a depiction of facilities and conditions within the 100' Preserve Edge and outside of the RMP Preserve. These areas also function as Fuel Modification Zones.

The Proposed Project Amendment includes ~~an internal circulation option for Village 14,~~ the Perimeter Trail ~~Option~~⁴ within Central Village 14. Portions of the Perimeter Trail Option would be within the 100' Preserve Edge ~~in Central Village 14~~, as depicted on Exhibit 18, Typical Conditions within 100' Preserve Edge – Village 14. The Perimeter Trail ~~Option~~ would be comprised of a 4 to 8-foot graded width with a 2 to 6-foot natural soil surface trail tread. Retaining walls (3' to 7' high) (refer to Exhibit 17, Typical Fence & Wall Details) associated with the Perimeter Trail ~~Option~~ would be located within the 100' Preserve Edge. Post and rail fencing to be provided where necessary based on final engineering design.

⁴ The County Board of Supervisors adopted the Perimeter Trail ~~Option for within~~ Central Village 14 ~~area as part of the Approved Project~~. The South Village 14 Perimeter Trail ~~option~~ was not adopted.



[See Chapter VI. Internal Circulation Option for the Typical Condition 8 Option.](#)

Exhibit 18 - Typical Conditions within 100' Preserve Edge per the Otay Ranch RMP Requirements

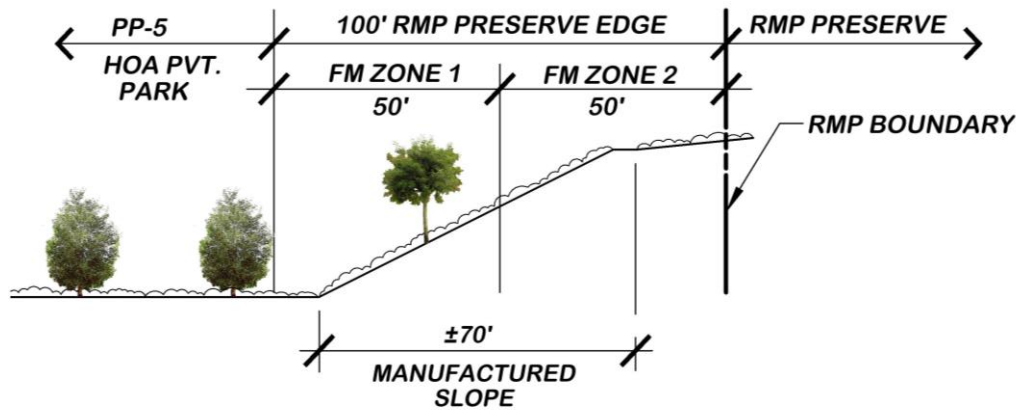


Exhibit 19 – Typical Condition 1 – Perimeter Slope @ Single Family R-12
Not to scale

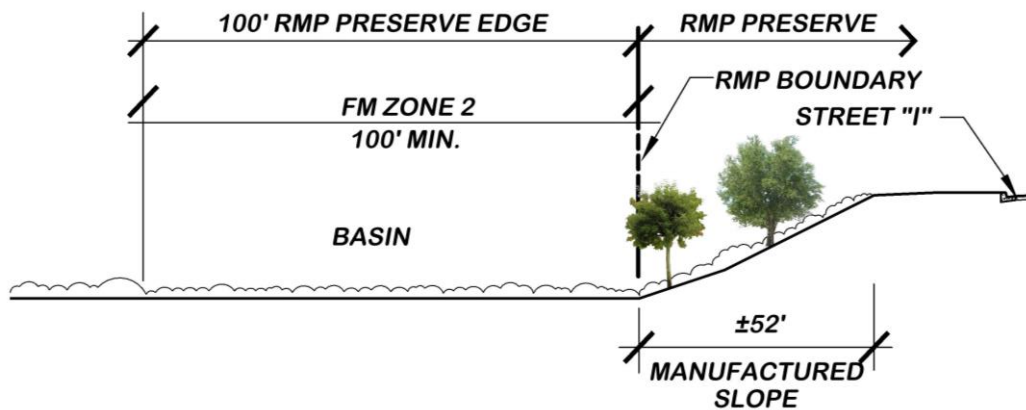


Exhibit 20– Typical Condition 2 – Biofiltration Basin
Not to scale

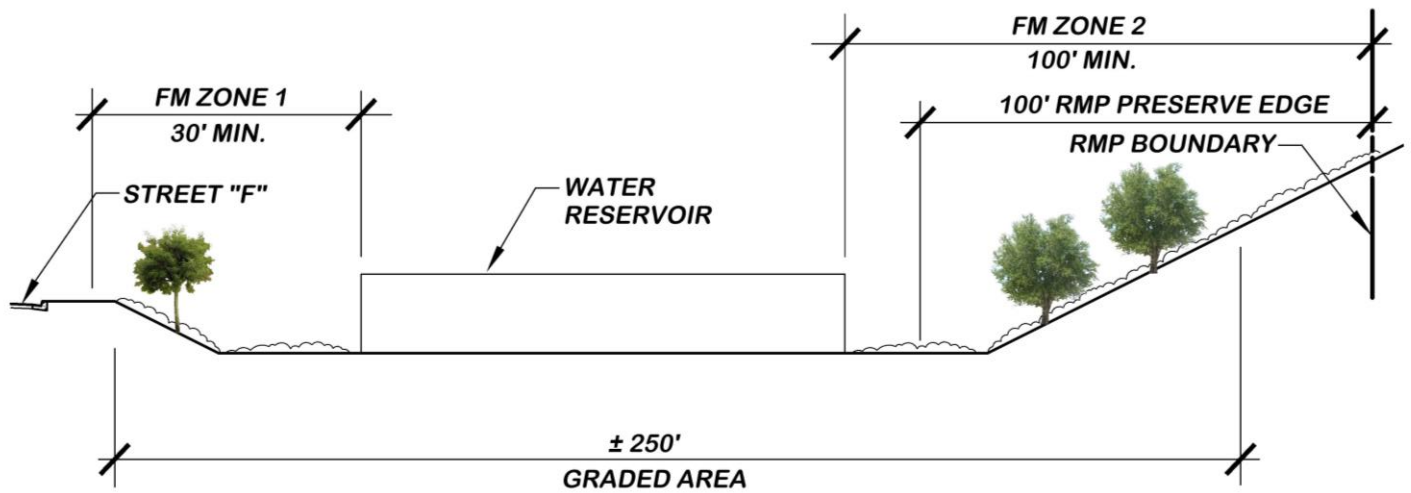
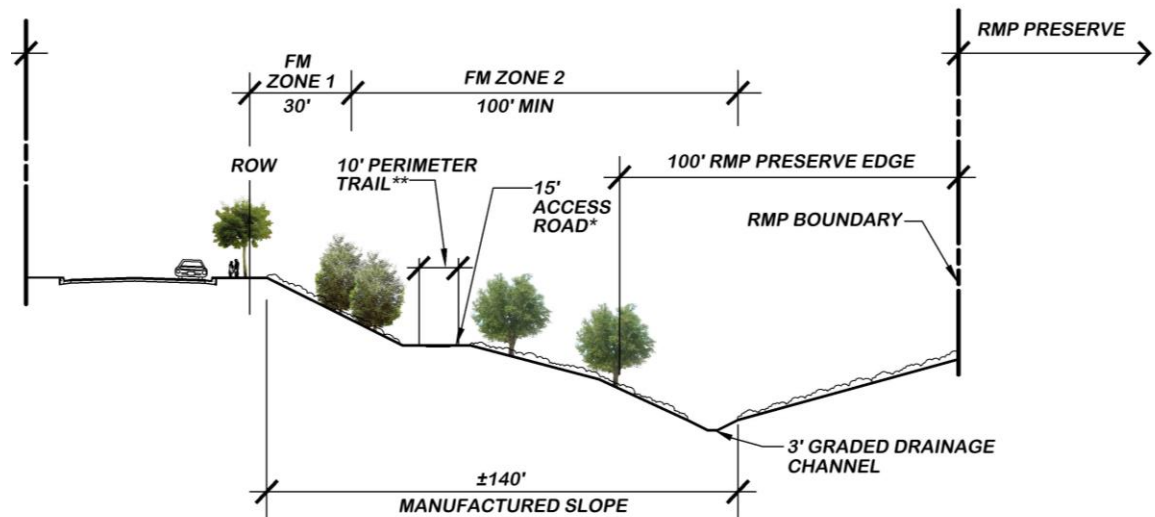


Exhibit 21 – Typical Condition 3 – Water Reservoir @ Single Family R-4

Not to scale



* LOCATION OF ACCESS ROAD SHOWN VARIES AND FALLS WITHIN PRESERVE EDGE IN SOME AREAS.

** LOCATION OF PERIMETER TRAIL MAY BE WITHIN THE WIDTH OF ACCESS ROAD IN SOME AREAS.

Exhibit 22 – Typical Condition 4 – Perimeter Slope @ Single Family R-4

Not to scale

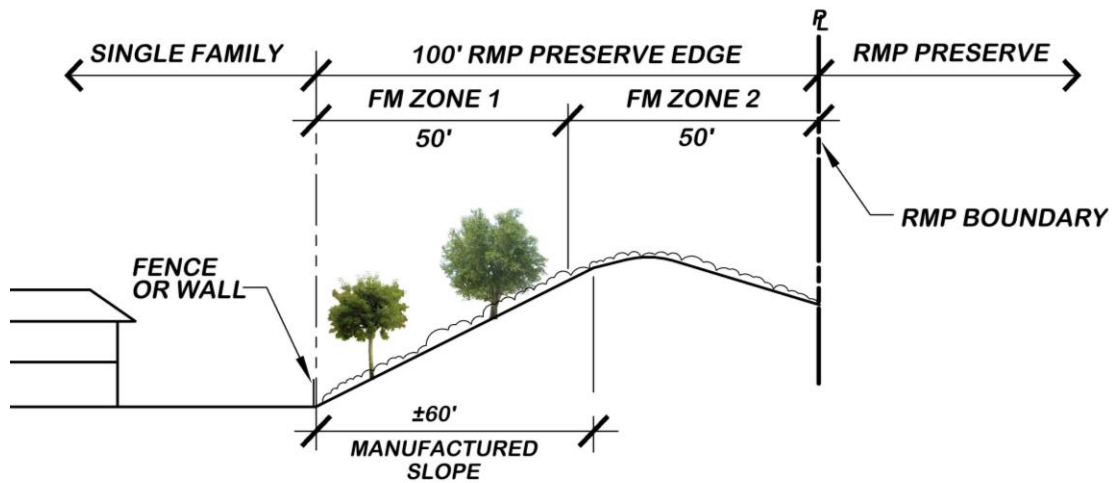


Exhibit 23 – Typical Condition 5 – Perimeter Slope @ Single Family R-3
Not to scale

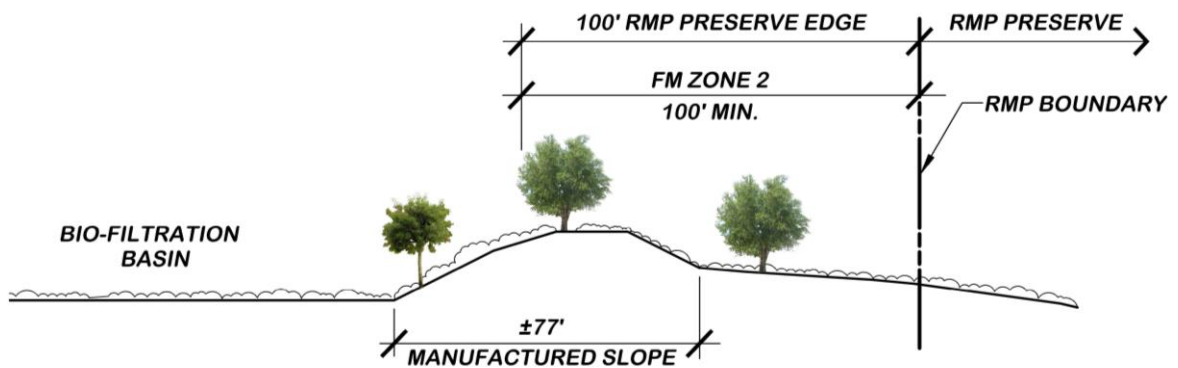
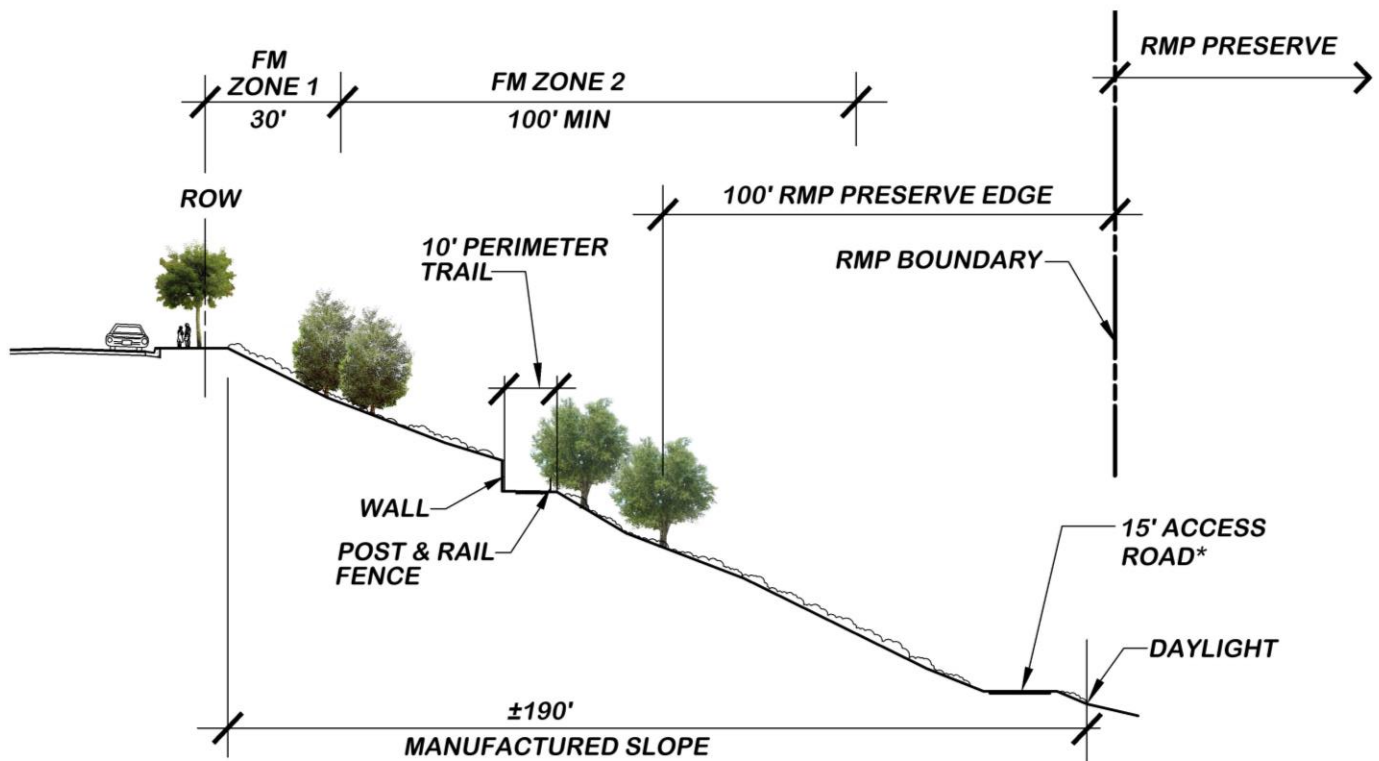


Exhibit 24 – Typical Condition 6 – Biofiltration Basin

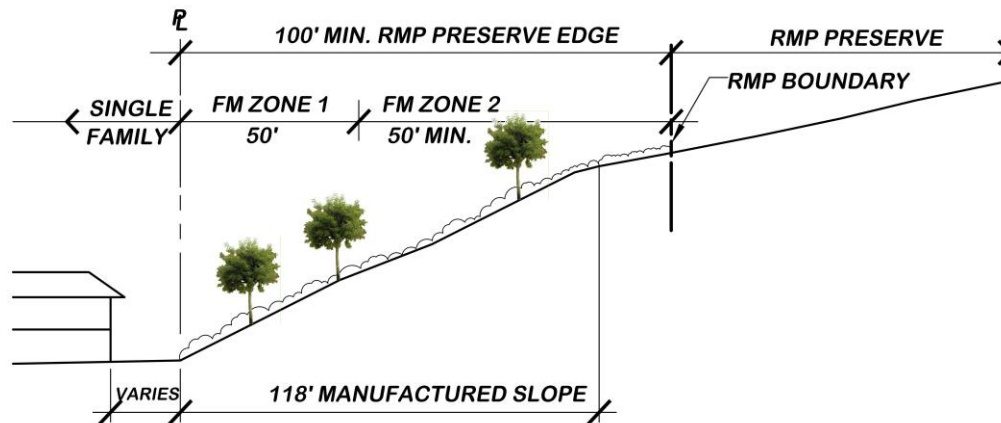


* LOCATION OF ACCESS ROAD SHOWN VARIES AND FALLS WITHIN PRESERVE EDGE IN SOME AREAS.

Note: The County Board of Supervisor adopted the Perimeter Trail ~~Option for within~~ Central Village 14 ~~only with adoption of the Approved Project~~. The Perimeter Trail ~~Option for within~~ South Village 14 was not adopted. Consistent with the 10' Trail Easement depicted above, Perimeter Trail ~~Option~~ improvements would include a 4 to 8' graded width with a 2-6' native soil trail tread and 5 to 7-foot high retaining walls. Portions of the Perimeter Trail ~~Option~~ would be within the Central Village 14 100' Preserve Edge area (refer to Exhibit 18).

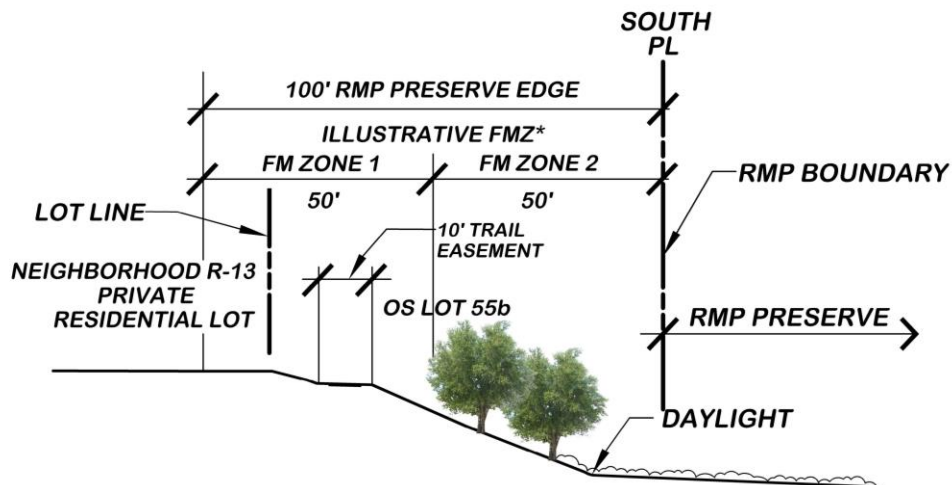
Exhibit 25 – Typical Condition 7 – Perimeter Slope with Trail Easement and Retaining Wall @ Single Family R-4

Not to scale



[See Chapter VI. Internal Circulation and Reservoir Option for the Typical Condition 8 Option](#)

Exhibit 26 – Typical Condition 8 – Perimeter Slope @ Multi-Family R-8
Not to scale



* EXACT LOCATION OF FUEL MOD ZONES TO BE DETERMINED DURING SITE PLAN REVIEW PROCESS.

Exhibit 27 – Typical Condition 9 – Perimeter Slope @ Single Family R-13
Not to scale

I. DRAINAGE

Otay Ranch RMP (Policy 2.13):

Design drainage improvements within identified floodplains to provide adequate flood protection and sensitivity to biological resources.

Standards:

- 1) Flood control plans shall be in conformance with RMP policies protecting sensitive resources and with State and Federal wetland regulations.
- 2) Concrete or rip-rap flood control channels shall be prohibited within the Preserve. Drop structures and armour lock structures shall be avoided. Minimal structural improvements may be permitted for road and utility crossing and for the protection of the public health, safety and general welfare.
- 3) Drainage improvement shall not result in an increase in erosion or sedimentation that would adversely affect Preserve resources.

Guideline: Detention basins and energy dissipators may be used.

Compliance:

The *CEQA Drainage Study, Otay Ranch Village 14 and Planning Areas 16/19 Proposed Project Amendment* (“Drainage Plan”) and *Priority Development Project (PDP) Storm Water Quality Management Plan (SWQMP), Otay Ranch Village (Village 14) and Planning Areas 16 and 19 Proposed Project Amendment* (“Water Quality Plan”) prepared by Hunsaker and Associates assessed the existing and developed drainage and water quality conditions in Proposed Project Amendment Area. In conformance with the Otay Ranch GDP/SRP and Specific Plan requirements, the Drainage Plan provides the necessary hydrological studies, analysis and design solutions to provide appropriate urban runoff and water quality for the Proposed Project Amendment Area. Key elements of the Drainage Plan and Water Quality Plan are described below (refer to Exhibit 10 for Biofiltration Basin locations).

DRAINAGE

Pre-development and post-development runoff from the Proposed Project Amendment Area is within the upper reaches of the Otay Hydrologic Unit watershed.

- Proctor Valley is a natural conveyance system that empties into the Upper Otay Reservoir. In turn, the Upper Otay Reservoir empties into the Lower Otay Reservoir and Savage Dam. Attenuated runoff is released into the Otay River downstream of the dam.
- The Proposed Project Amendment will increase peak flows to Proctor Valley. However, flooding concerns are mitigated by the storage volume provided by the Otay Reservoir System. The City of San Diego has indicated opposition of any reduction in volume of runoff into the Lower Otay Reservoir and will impound the maximum amount of water possible.

- The drainage infrastructure serving the Proposed Project Amendment consists of storm drain, inlets, headwalls, basins and cleanouts. The outlet structures within Village 14, and Planning Area 19 ~~and the portion of Planning Area 16 west of neighborhood R-16~~ discharge directly into Proctor Valley. ~~The outlet structures within residential neighborhood R-16 in Planning Area 16 discharge directly to a Jamul Creek tributary.~~ Structural BMPS must be shown on all landscape plans.

URBAN RUNOFF/WATER QUALITY

Development of the Specific Plan will implement necessary requirements for water quality as specified by the State and local agencies.

Development of the Proposed Project Amendment will meet the requirements of the County's Watershed Protection, Stormwater Management and Discharge Control Ordinance (WPO, the Jurisdiction Runoff Management Program and Model BMP Design Manual San Diego Region.

Prior to discharging runoff from the developed portions of the Proposed Project Amendment into either Proctor Valley or a Jamul Creek tributary, runoff is treated in biofiltration basins located at the downstream ends of the storm drain systems. In compliance with the most current County BMP Design Manual relative to the preservation of critical coarse sediment (CSS) and hydromodification, the Proposed Project Amendment identifies areas tributary to the Development Area which have potential critical coarse sediment and routes them through the Proposed Project Amendment. Attachment 2c of the SWQMP contains a map which overlays the County-generated Watershed Management Area Analysis (WMAA) Map with the Development Area and demonstrates that the CSS yield areas north of the Development Area will be routed through the Development Area.

Regular maintenance activities within the basins are anticipated four times a year (February, May, September and December). Rainy Season (February and December) and Pre-Rainy Season (September) maintenance activities include removal of trash, debris and excess sediment, clear clogged riser orifices and perform basin area repairs. Post-Rainy Season maintenance includes full silt removal from the dry weather storage area, vegetation removal, annual inspections by a registered civil engineer, removal of trash, debris and excess sediment above the dry weather zone, clear clogged riser orifices and perform basin area repairs. Additional maintenance may be required following major rainfall events unless the next regularly scheduled maintenance dates are within one month of the rain event. Access to the bioretention basin will be provided for maintenance purposes.

No runoff from developed or impervious portions of the Proposed Project Amendment Development Area will outlet directly to Proctor Valley without prior water quality treatment. Some graded slopes along the Proposed Project Amendment Area's perimeter will be self-treating.

In addition to the permanent drainage facilities, temporary desiltation basins will be constructed within the Development Area during each grading phase to control sedimentation during construction. The interim desiltation basins are designed to prevent discharge of sediment from the project grading operations into natural drainage channels and will be detailed in the Storm Water Pollution Prevention Plan (SWPPP) for Village 14 and Planning Areas ~~16/~~19, as required by the Construction General Permit from the State Water Resources Control Board. The exact size, location and component elements of these interim basins will be identified on the grading plans and SWPPP. Temporary, interim measures will occur within the Proposed Project Amendment Development Area and will be addressed in the SWPPP.

IV. BEST MANAGEMENT PRACTICES WITHIN THE 100' RMP PRESERVE EDGE

In addition to compliance with the Otay Ranch GDP/SRP, RMP and MSCP County Subarea Plan, the Village 14 and Planning Areas 16/19 Proposed Project Amendment Specific Plan includes implementation of best management practices to reduce potential impacts of development on the RMP Preserve. Strategies related to toxic substances, irrigation, noise and invasive plant materials that will provide additional protections to the RMP Preserve are discussed below.

A. TOXIC SUBSTANCES

As described in greater detail in the Water Quality Plan, the combination of proposed construction and permanent BMPs will reduce, to the maximum extent possible, the expected project pollutants and will not adversely impact the beneficial uses of the receiving waters.

Pollutants generated during the construction of each grading phase will be controlled via BMP treatment strategies described within the SWPPP. The SWPPP will comply with the NPDES General Permit for Discharges associated with Construction Activities. The SWPPP will provide guidance to prevent or effectively reduce pollutants prior to discharging from the Development Areas. Proposed construction phase BMPs will serve various purposes, including erosion control, sediment control, wind erosion control and tracking control, as well as management of non-storm water runoff and waste management controls.

Anticipated pollutants from the Proposed Project Amendment may include sediments, nutrients, heavy metals, organic compounds, trash and debris, oxygen demanding substances, oil and grease, bacteria and viruses and pesticides. Runoff from developed areas will be transmitted via public storm drain to biofiltration basins located within the Proposed Project Amendment Area.

Storm water pollutants are removed through physical and biological processes, including adsorption, filtration, plant uptake, microbial activity, decomposition, sedimentation and volatilization (EPA 1999). Adsorption is the process whereby particulate pollutants attach to soil (e.g., clay) or vegetation surfaces. Pollutants removed by adsorption include metals, phosphorus, and hydrocarbons. Filtration occurs as runoff passes through the bioretention area media, such as the sand bed, ground cover and planting soil. Treated water is released into the Upper Otay Reservoir within 96 hours of capture. This system ensures that, to the greatest extent practicable, the RMP Preserve adjacent to the Proposed Project Amendment Area will not be impacted from toxic substances that may be generated from the Proposed Project Amendment.

B. IRRIGATION

Excessive runoff into the RMP Preserve from adjacent irrigated slopes will be prevented by implementation of control BMPs to be installed prior to planting and watering to prevent siltation into the RMP Preserve. The irrigation system installed on the slopes shall have an automatic shutoff valve to prevent erosion in the event the

pipes break. Flow sensors to detect high flow conditions created by system damage or malfunction and master shut-off valves shall be incorporated into the irrigation system design, as required by the County's Water Conservation in Landscaping Ordinance. Soil moisture probes located at the bottom and toe of side slopes of all vegetated basins shall be included as an additional BMP to ensure that the irrigation controller does not activate valves irrigating those areas during periods of inundation. Irrigation schedules for the slopes adjacent to the RMP Preserve must be evaluated and tested in the field to determine the appropriate water duration and irrigation adjustments, as necessary, to prevent excessive runoff.

These individual measures are water conserving, however when combined, water efficiency is extremely high, and waste and run-off virtually eliminated. Detailed irrigation plans will be prepared in conjunction with slope improvement plans and approved by the County's Landscape Architect.

C. NOISE

The ~~EIR for Certified Village 14 and Planning and Areas 16/19 EIR (16-19-006) and the Noise Technical Memorandum the Otay Ranch Village 14 and Planning Areas 16/19 Proposed Project Amendment, Prepared by Dudek (December 2019)~~ includes analyses of potential impacts to wildlife within the RMP Preserve. ~~Certified EIR (16-19-006) Mitigation m~~Measures will ~~be required to~~ mitigate potential significant noise impacts to wildlife to less than significant; refer to the ~~Certified EIR (16-19-006)~~ for specific noise mitigation measures.

D. INVASIVE PLANT MATERIALS

An Approved Plant List (Attachment "A") was prepared for the Proposed Project Amendment in consultation with a qualified biologist (Brock Ortega, Dudek) and an urban forestry and fire protection planning specialist (Michael Huff, Dudek). Landscape plans within the 100' Preserve Edge may not contain invasive species, consistent with the Approved Plant List. Landscape areas within the 100' Preserve Edge including, but not limited to, manufactured slopes, biofiltration basins, street-adjacent landscaping, public parks must comply with the Approved Plant List. The Approved Plant List is consistent with the requirements outlined in the FPP, as these areas are also within the 100' Fuel Modification Zone. Plants not listed in the Approved Plant List are prohibited within the 100' Preserve Edge. Proposed changes to the Approved Plant List must be reviewed by a qualified biologist and reviewed and approved the Planning & Development Services Director and SDCFA. The area may be planted with container stock (liners) or a hydroseed mix. See the FPP for landscape planting and irrigation requirements.

In addition, a manual weeding program or the focused application of glyphosate shall be implemented on the manufactured slopes adjacent to the RMP Preserve to control weeds that are likely to be encouraged by irrigation within the 100' Preserve Edge/Fuel Modification Zone. Weed control efforts shall occur quarterly, or as needed, to provide weed control to ensure that no invasive species migrate into the adjacent RMP Preserve. Weed monitoring is required during the plant establishment period (typically two to three years for shrubs and up to five years for trees) to prevent weeds on the manufactured slopes from spreading into the

adjacent RMP Preserve. Either the HOA or County's landscape monitoring firm will be responsible to check the irrigated slopes during plant establishment to verify that excessive runoff does not occur and that any weed infestations are controlled.

V. CITY OF SAN DIEGO MSCP LAND USE ADJACENCY GUIDELINE COMPLIANCE

A portion of Village 14 is adjacent to properties identified in the City of San Diego MSCP as "Cornerstone Properties." These MSCP Preserve areas are limited to the southern edge of Central Village 14 ~~and the western edge of South Village 14~~, (refer to Exhibit 3, ~~Village 14~~ Project Context). Portions of single-family neighborhoods R-1, ~~R-2, R-4 and R-12~~, a water quality/hydromodification basin and ~~a portion of~~ neighborhood park P-32 (~~P-3-a/b~~) are adjacent to the City of San Diego MSCP Preserve (refer to Exhibit 28). Though these areas are not subject to RMP Preserve Edge Plan requirements discussed above, they are subject to City of San Diego MSCP Subarea Plan, Section 1.4.3, Land Use Adjacency Guidelines. Each applicable guideline is listed below and followed by an explanation of how the Proposed Project Amendment complies with the guidelines.

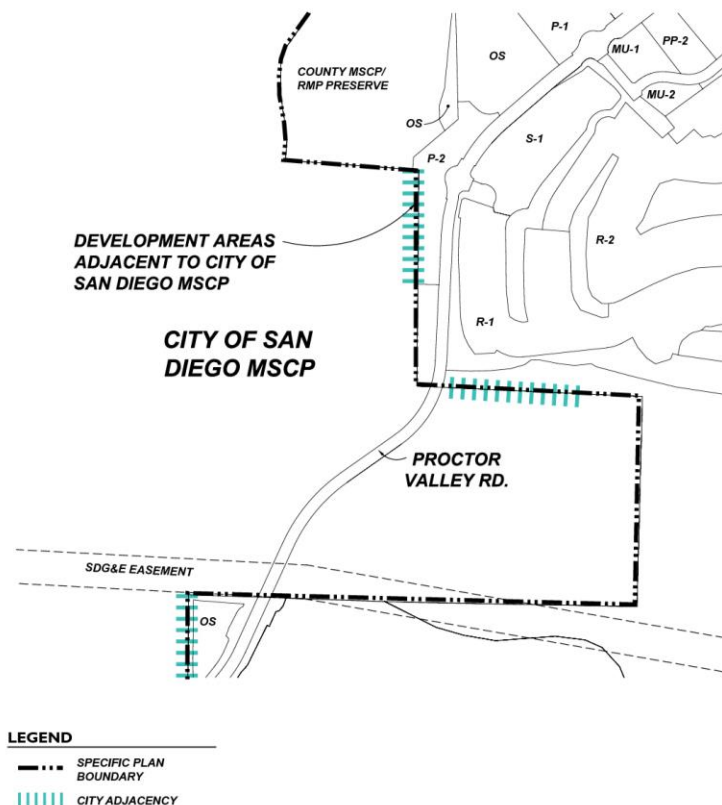


Exhibit 28 – Village 14 Development Areas Adjacent to City of San Diego MSCP Preserve

Not to scale

The City of San Diego Multi-Habitat Planning Area (MHPA) is the planned habitat preserve within the City of San Diego MSCP Subarea. The City of San Diego MSCP Subarea Plan is the regional program through which the MHPA will be assembled as each participating jurisdiction implements their portion of the City of San Diego MSCP. The MSCP Plan regional preserve for southwestern San Diego County is targeted at 172,000 acres.

The following excerpt from the City of San Diego MSCP Subarea Plan, Section 1.4.3, Land Use Adjacency Guidelines is provided to guide the land uses adjacent to the MHPA:

1.4.3. Land Use Adjacency Guidelines

Land uses planned or existing adjacent to the MHPA include single family, multiple family residential, active recreation, commercial, industrial, agricultural, landfills, and extractive uses. Land uses adjacent to the MHPA will be managed to ensure minimal impacts to the MHPA. Consideration will be given to good planning principles in relation to adjacent land uses as described below. The following are adjacency guidelines that will be addressed, on a project-by-project basis, during either the planning (new development) or management (new and existing development) stages to minimize impacts and maintain the function of the MHPA.

A. DRAINAGE

Guideline:

1 - All new and proposed parking lots and developed areas in and adjacent to the preserve must not drain directly into the MHPA. All developed and paved areas must prevent the release of toxins, chemical, petroleum products, exotic plant materials and other elements that might degrade or harm the natural environment or ecosystem processes within the MHPA. This can be accomplished using a variety of methods including natural detention basins, grass swales or mechanical trapping devices. These systems should be maintained approximately once a year, or as often as needed, to ensure proper functioning. Maintenance should include dredging out sediments if needed, removing exotic plant materials, and adding chemical-neutralizing compounds (e.g., clay compounds) when necessary and appropriate.

Compliance:

The Drainage Plan and Water Quality Plan prepared by Hunsaker and Associates assessed the existing and developed drainage and water quality conditions in the Project Area. In conformance with the Otay Ranch GDP/SRP and Specific Plan requirements, the Drainage Plan provides the necessary hydrological studies, analysis and design solutions to provide appropriate urban runoff and water quality for the Project Area. Key elements of the Drainage Plan and Water Quality Plan are above in Section 7 - Drainage. Refer to Exhibit 10 for biofiltration basin locations.

B. TOXICS

Guideline:

2 - Land uses, such as recreation and agriculture, that use chemicals or generate by-products such as manure, that are potentially toxic or impactful to wildlife, sensitive species, habitat, or water quality need to incorporate measures to reduce impacts caused by the application and/or drainage of such materials into the MHPA. Such measures should include biofiltration basins, swales, or holding areas with non-invasive grasses or wetland-type vegetation to filter out the toxic materials. Regular maintenance should be provided. Where applicable, this requirement should be incorporated into leases on publicly owned property as leases come up for renewal.

Compliance:

As described in greater detail in the Water Quality Technical Report, prepared by Hunsaker & Associates, the combination of proposed construction and permanent BMPs will reduce, to the maximum extent possible, the expected project pollutants and will not adversely impact the beneficial uses of the receiving waters.

Anticipated pollutants from the Proposed Project Amendment may include sediments, nutrients, heavy metals, organic compounds, trash and debris, oxygen demanding substances, oil and grease, bacteria and viruses and pesticides. Runoff from Village 14 will be transmitted via public storm drain to biofiltration basins located within the Proposed Project Amendment Area. Storm water pollutants are removed through physical and biological processes, including adsorption, filtration, plant uptake, microbial activity, decomposition, sedimentation and volatilization (EPA 1999). Adsorption is the process whereby particulate pollutants attach to soil (e.g., clay) or vegetation surfaces. Pollutants removed by adsorption include metals, phosphorus, and hydrocarbons. Filtration occurs as runoff passes through the bioretention area media, such as the sand bed, ground cover and planting soil. Treated water is released into the Otay Reservoir System within 96 hours of capture. This system ensures that, to the greatest extent practicable, the MSCP Preserve will not be impacted from toxic substances that may be generated from the Proposed Project Amendment Area. Construction BMPs will be described in the SWPPP.

C. LIGHTING

Guideline:

3 - Lighting of all developed areas adjacent to the MHPA should be directed away from the MHPA. Where necessary, development should provide adequate shielding with non-invasive plant materials (preferably native), berming, and/or other methods to protect the MHPA and sensitive species from night lighting.

Compliance:

The amended Village 14 Design Plan includes criteria for the design of lighting, including areas adjacent to the MSCP Preserve. Improvement plans for the areas adjacent to the MSCP Preserve include shielded lighting designs that avoid spillover light in the MSCP Preserve. Lighting Plans and a photometric analysis shall be prepared in conjunction with improvement plans for areas adjacent to the MSCP Preserve to illustrate the location of proposed lighting standards and type of shielding measures. Lighting Plans and accompanying photometric analyses must also be prepared in conjunction with streets, public parks and other improvements proposed adjacent to the MSCP Preserve, to demonstrate that light spillage into the MSCP Preserve is avoided to the greatest extent possible. Nighttime lighting is not proposed within public parks. The County Parks and Recreation Department will enforce and control hours of operation (generally dawn to dusk within public parks).

D. NOISEGuideline:

4 - Uses in or adjacent to the MHPA should be designed to minimize noise impacts. Berms or walls should be constructed adjacent to commercial areas, recreational areas, and any other use that may introduce noises that could impact or interfere with wildlife utilization of the MHPA. Excessively noisy uses or activities adjacent to breeding areas must incorporate noise reduction measures and be curtailed during the breeding season of sensitive species. Adequate noise reduction measures should also be incorporated for the remainder of the year.

Compliance:

A Portions of ~~two~~-neighborhood parks ~~are~~ P-2 is located adjacent to the City of San Diego MSCP Preserve. Specific noise attenuation measures will be designed in conjunction with the preparation of park improvement plans. ~~Park concept plans have been designed to orient active uses away from the MSCP Preserve to the greatest extent possible, given design constraints. See the Certified EIR (16-19-006) for mitigation measures incorporated during construction that address construction noise adjacency issues. When single family homes are located adjacent to the MSCP Preserve, 6' high solid walls (refer to Exhibit 17, Typical Fence and Wall Details) to be constructed at the rear property line. A 100' buffer area (100' Preserve Edge) to be provided within parks for additional noise attenuation.~~

E. BARRIERSGuideline:

5 - New development adjacent to the MHPA may be required to provide barriers (e.g., non-invasive vegetation, rocks/boulders, fences, walls, and/or signage) along the MHPA boundaries to direct public access to appropriate locations and reduce domestic animal predation.

Compliance:

The ~~Specific Plan~~Proposed Project Amendment provides access to the MSCP Preserve and Fuel Modification Zone/100' Preserve Edge for maintenance and fire protection activities via maintenance gates provided approximately every 1,000' along the perimeter of the Proposed Project Amendment ~~Development~~ Area (refer to Exhibit 16, Conceptual Fence and Wall/Access Plan).

Perimeter walls are intended to create a barrier between the Proposed Project Amendment ~~Development~~ Area and the MSCP Preserve. Walls will be constructed outside the MSCP Preserve, within the Fuel Modification Zone and will be maintained by the Master HOA or the County's landscape monitoring firm. Signage identifying the MSCP Preserve and notifying the public of access restrictions, will be provided at key locations along the perimeter of the Proposed Project Amendment Area. ~~Development Area~~.

F. INVASIVES

Guideline:

6 - No invasive non-native plant species shall be introduced into areas adjacent to the MHPA.

Compliance:

An Approved Plant List (Attachment "A") was prepared for the Proposed Project Amendment in consultation with a qualified biologist (Brock Ortega, Dudek) and an urban forestry and fire protection planning specialist (Michael Huff, Dudek). Landscape areas adjacent to the MSCP Preserve including, but not limited to, manufactured slopes, biofiltration basins, street-adjacent landscaping, public parks must comply with the Approved Plant List. The Approved Plant List is consistent with the requirements outlined in the FPP as these areas are also within the 100' Fuel Modification Zone. Proposed changes to the Approved Plant List must be approved by a qualified biologist and the County's Landscape Architect and SDCFA. The area may be planted with container stock (liners) or a hydroseed mix. Refer to the FPP for landscape planting and irrigation requirements.

In addition, a manual weeding program or the focused application of glyphosate shall be implemented on the manufactured slopes adjacent to the MSCP Preserve to control weeds that are likely to be encouraged by irrigation within the Fuel Modification Zone. Weed control efforts shall occur quarterly or as needed, to provide weed control to ensure that no invasive species migrate into the adjacent MSCP Preserve. Weed monitoring is required during the plant establishment period (typically two to three years for shrubs and up to five years for trees) to prevent weeds on the manufactured slopes from spreading into the adjacent MSCP Preserve. Either the HOA or County's landscape monitoring firm will be responsible to check the irrigated slopes during plant establishment to verify that excessive runoff does not occur and that any weed infestations are controlled.

G. BRUSH MANAGEMENT

Guideline:

7 - New residential development located adjacent to and topographically above the MHPA (e.g., along canyon edges) must be set back from slope edges to incorporate Zone 1 brush management areas on the development pad outside of the MHPA. Zones 2 and 3 will be combined into one zone (Zone 2) and may be located in the MHPA upon granting of an easement to the City (or other acceptable agency) except where narrow wildlife corridors require it to be located outside the MHPA. Zone 2 will be increased by 30 feet, except in areas with a low fire hazard severity rating where no Zone 2 would be required. Brush management zones will not be greater in size that is currently required by the City's regulations. The amount of woody vegetation clearing shall not exceed 50 percent of the vegetation existing when the initial clearing is done. Vegetation clearing shall be done consistent with City standards and shall avoid/minimize impacts to covered species to the maximum extent possible. For all new development, regardless of the ownership, the brush management in the Zone 2 area will be the responsibility of an HOA or other private party.

Compliance:

The FPP establishes a 100' Fuel Modification Zone (Brush Management Zone) along the perimeter of the Village 14 Proposed Project Amendment Area development area. The Fuel Modification Zone is located outside of the MSCP Preserve and consists of two 50' zones (Zone 1 and 2). Refer to Section C- Compliance with RMP Policies and City MSCP Guideline, 7- Fuel Modification Zones for additional requirements and restrictions.

H. GRADING/LAND DEVELOPMENT

Guideline:

8 - Manufactured slopes associated with site development shall be included within the development footprint for projects within or adjacent to the MHPA.

Compliance:

As depicted on the Revised Preliminary Grading Plan/Tentative Map for the Proposed Project Amendment, manufactured slopes are included within the development footprint. Manufactured slopes are established as separate open space lots on the Revised Vesting Tentative Map and will be maintained by a Master HOA or County's landscape monitoring firm.

VI. INTERNAL CIRCULATION AND RESERVOIR OPTION

In response to a request from the Wildlife Agencies, the Applicant prepared an option for the realignment of Street “I” adjacent to neighborhood R-8 and the OWD Reservoir/Access Road and Water Transmission Line (“Option”). (Refer to Exhibit 29 – Street “I” Realignment Option, Exhibit 30 – OWD Reservoir/Access Road/ Water Transmission Line Option and Exhibit 31 – Typical Condition 8 – Perimeter Slope/Street “I” @ Single Family R-8 Option).

The Option would realign Street “I” to the west adjacent to neighborhood R-8 and would place the street within the 100’ Preserve Edge and the 100’ FMZ.

The Option would shift the OWD access road south and add a small retaining wall. The OWD Reservoir, Access Road is required for the OWD water transmission line and access to the 980-Zone regional reservoir facility. The access road also provides secondary fire access for Village 14. The access road and the water reservoir are allowed facilities in the Otay Ranch RMP and the County’s MSCP Subarea Plan.

The Option would further reduce edge effects and impacts in the Preserve as compared to the Approved Project.

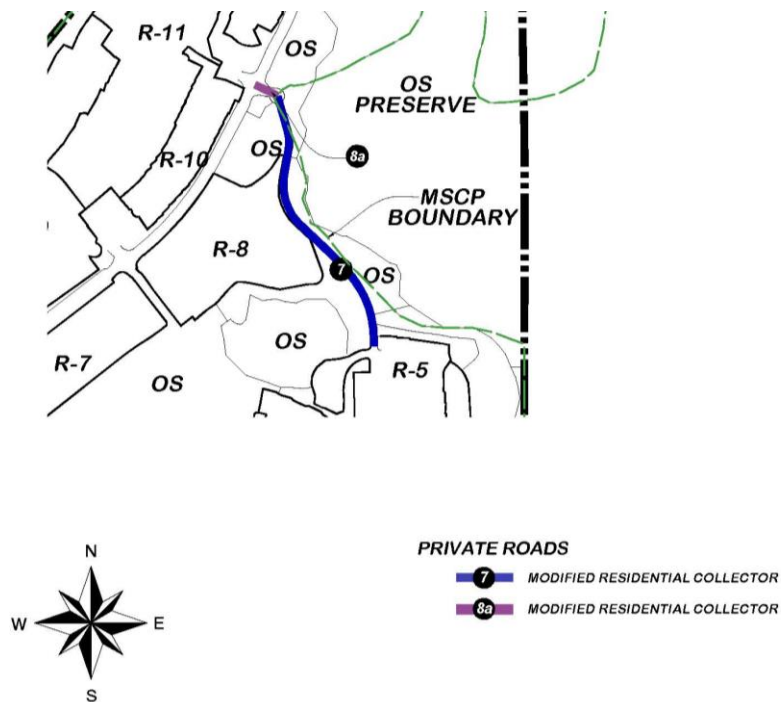


Exhibit 29 – Street “I” Realignment Option

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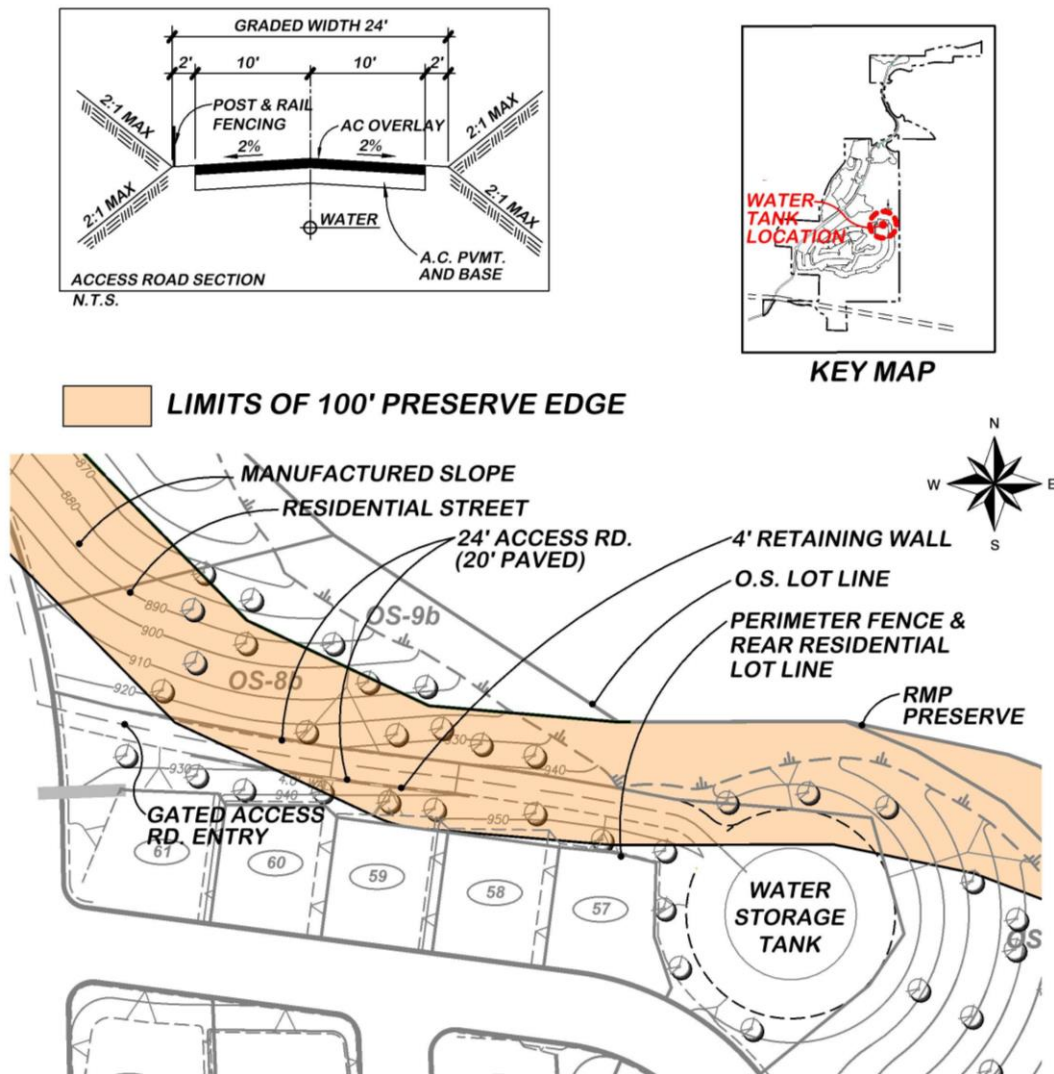


Exhibit 30 – OWD Reservoir, Access Road and Water Transmission Line Option

Not to scale

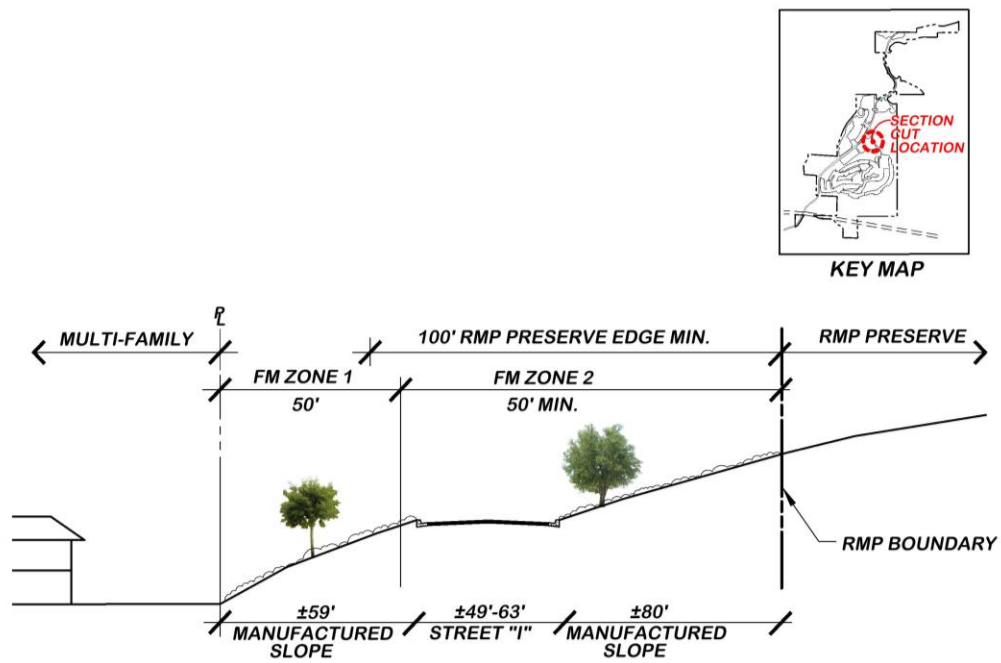


Exhibit 31 – Typical Condition 8 – Perimeter Slope/Street “I” @ Single-Family R-8

Not to scale

**ATTACHMENT “A”
APPROVED PLANT LIST**

MARCH 2020

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APPROVED PLANT LIST

MARCH 2020

The Approved Plant List was prepared in consultation with Brock Ortega, Biologist (Dudek) and Michael Huff, Urban Forester & Fire Protection Planner (Dudek).

RMP PRESERVE INTERFACE/TRANSITIONAL AREAS

(slopes adjacent to open space, 100' FMZ, slope transition for ornamental to open space)

TREES

| | <u>Common Name</u> | <u>Height at Maturity</u> |
|-------------------|--------------------|---------------------------|
| Quercus agrifolia | Coast Live Oak | 50' |
| Arbutus unedo | Strawberry Tree | 25' |
| Rhus ovata | Sugar Bush | 12' |

SHRUBS

| | |
|---------------------------------|--------------------------|
| Agave attenuata | Century Plant |
| Agave shawii* | Coastal Agave |
| Archtopstapyllos Emerald Carpet | Emerald Carpet Manzanita |
| Baccharis pilularis | Dwarf Coyote Bush |
| Ceanothus species | Carmel Creeper |
| Cistus species | Rock Rose |
| Cotoneaster dammeri 'Lowfast' | Bearberry Cotoneaster |
| Dalea orcuttii | Baja Indigo Bush |
| Epilobium californicum | California Fushcia |
| Heteromeles arbutifolia | Toyon |
| Leymus c. 'Canyon Prince' | Canyon Prince Wild Rye |
| Mimulus auranticus | Monkey Flower |
| Rhamnus californica | California Coffeeberry |
| Sambucus species | Elderberry |
| Yucca schidigera | Mojave Yucca |
| Yucca whipplei | Foothill Yucca |

GROUND COVER

| | |
|------------------------------------|-------------|
| Baccharis pilularis 'pigeon point' | Coyote Bush |
|------------------------------------|-------------|

HYDROSEED MIX:

| | |
|-------------------------|------------------|
| Dichelostemma capitatum | Wild-Hyacinth |
| Distichlis spicata | Salt Grass |
| Dudleya edulis | Lady's Fingers |
| Dudleya pulverulenta | Chalk Duleya |
| Lasthenia californica | Goldfields |
| Layia platyglossa | Tidy Tips |
| Lupinus bicolor | Miniature Lupine |
| Sisyrinchium bellum | Blue-Eyed Grass |

BIOFILTRATION BASINS

TREES

Alnus rhombifolia White Adler
Plantanus racemosa
Safix lasiolepis
Salix lucida
Sambucus Mexicana

California Sycamore
Arroyo Willow
Lance-Leaf Willow
Blue Elderberry

SHRUBS/GROUNDCOVER

Achillea millefolium
Agrostis palens
Anemopsis californica
Carex preaeagricillis
Distichlis spicata
Eleocharis macrostachya
Festuca californica
Festuca rubra
Iva hayesiana
Jucus patens
Juncus acutus
Juncus Mexicana
Leymus condenstatus 'Canyon Prince'
Mahonia nevinii
Plantago insularus
Ribes speciosum
Rosa californica
Scripus cenuus
Sisyrinchium bellum

Yarrow
Thingrass
Yerba Manza
California Field Sedge
Salt Grass
Pale Spike Rush
California Fescue
Creeping Red Fescue
Hayes Iva
California Gray Rush
Spiny Rush
Mexican Rush
Canyon Prince Wild Rye
Nevin's Barberry
Desert Indianwheat
Fushia Flowering Goose
California Wild Rose
Low Bullrush
Blue-eyed Grass

HYDROSEED MIX:

Artemisia douglasiana
Isocoma menziesii
Iva hayesiana
Sisyrinchium bellum

Mugwort
Goldenbush
San Diego Marsh Elder
Blue Eyed Grass

NOTES:

1. The Approved Plant List has been reviewed by Brock Ortega, Biologist (Dudek) and Michael Huff, Urban Forester & Fire Protection Planner (Dudek).
2. As verified by the Applicant's biologist, species included in the Approved Plant List include mostly plants native to California and occur naturally and frequently in San Diego County and other generally drought tolerant species that are not invasive.
3. Unless listed in the Approved Plant List, all other plant materials are prohibited.
4. All proposals to utilize plant materials not listed in the Approved Plant List are subject to review and approval by the County of San Diego (Planning & Development Services Department and San Diego County Fire Authority).
5. All California native plants and seeds planted within 100 feet of the RMP Preserve shall have origins from cismontane San Diego County. The supplier of landscape materials shall provide documentation verifying container plant and seed origins for landscaped areas adjacent to the RMP Preserve (100' Preserve Edge).
6. All plants would benefit from some supplemental irrigation during hot summer months, particularly those utilized on basin side slopes and further inland.
7. All trees should be planted a minimum of 10 feet from drain pipes and structures.